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#### **IEEE PROJECTS IN JAVA / J2EE / ANDROID: 2016 -17**

NJA 1 (DN 10001). Demonetization - Black Money - IOT: EFFECTIVE IDENTIFICATION OF BLACK MONEY, FAKE CURRENCY & EXPIRY USING NFC, IOT & ANDROID

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In **EXISTING SYSTEM**, to destroy the black money is not possible. Because of the people are not pay the correct tax amounts. The current issue in India is fake money and black money. In the **PROPOSED SYSTEM**, we first investigate the classic tax evasion cases, and employ a graph-based method to characterize their property that describes two suspicious relationship trails with a same antecedent node behind an Interest Affiliated Transaction (IAT). In **MODIFICATION PROCESS** is our implementation. NFC tag (Value, Serial Number & Expiry date) is attached with the Currency. 1. Money Counting Device is installed in every office for billing purpose. 2. For Mobile vendors NFC Reader is attached with the Android Phone. In both these two cases Currency details are dynamically transferred to the RBI Server. 3. We also implement QR code based amount transaction via Android Application 4. We are also implementing cashless transaction using card. Using all of the above four methodologies RBI can easily track of all the transactions (Income & Expenditure) made by every user. SMS Alert is done for currency expiry.

ALGORITHM / METHODOLOGY: NFC, QR Code

DOMAIN: IOT, Embedded, Android, Society / Social Cause

IEEE REFERENCE: IEEE Transaction on Knowledge and Data

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JA 6001 (DN 10002). Multi Bank Family Card: INTEGRATION OF MULTI BANK MULTI USER IN SINGLE CARD WITH USER BEHAVIOR MONITORING USING HMM & FORMULA VERIFICATION

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION**: In the **EXISTING SYSTEM**, Big data is really opportunity based environment. Big data analytics would definitely lead to valuable knowledge for many organizations. In the **PROPOSED SYSTEM**, Integration of Big Data, Business analytical and RFID like technology is supposed to be recent trends in IT. It is most challenge oriented activity. The **MODIFICATION**, which is our implementation, we are developing this application for a Banking sector particularly for a Debit / ATM \card section. We can use RFID smart card as ATM Card for transaction. User can create account and get the ATM card from the bank. He can integrate all his accounts in other banks can be integrated in this single card with unique PIN numbers accordingly. User behavior is monitored through HMM Model and he can set up a formula based authentication. He can include all his family members' accounts details also in the same card. He can withdraw cash from their accounts after successful authentication of the corresponding PIN numbers.

ALGORITHM / METHODOLOGY: HMM, Formula, Email Alert

**DOMAIN**: Big Data, IOT, Embedded, Society / Social cause

**IEEE REFERENCE:** IEEE Transaction on Cybernetics, 2016









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JA 6002. Flood Alert - No Tower - IOT: EFFECTIVE FLOOD ALERT WITH ANDROID & IOT BASED EMERGENCY SUPPORT IN NETWORK UNIDENTIFIED ZONE

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In **EXISTING SYSTEM**, people are facing drastic Human & Monetary lose due to the unexpected and sudden release of water. The **PROPOSED SYSTEM**, distributed system using water & flow level sensors are deployed all over and monitored, gathered to the centralized server for speedy & emergency support. In the **MODIFICATION PART**, an android app is deployed in all the Mobiles of the Public. Zigbee hardware is connected to the mobiles via OTG communication when network is not present. Zigbee is connected in the Dam for immediate communication of water & its flow level to communicate with the regional server where another Zigbee is connected. Public can communicate to the regional server to fetch the levels of water release & emergency alert is provided in case of excess water release from the Dam. This event will happen with Network presence or without network presence. User can also make Emergency call / send SMS to the prestored numbers like Hospitals / Corporation / Police / Relatives. User can also fetch Safe Zone live Mapping with internet or stored images without Internet.

<u>ALGORITHM / METHODOLOGY:</u> SMS Alert, Wireless <u>DOMAIN:</u> Android, IOT, Embedded, Society / Social cause IEEE REFERENCE: IEEE Journal on Sensors, 2016









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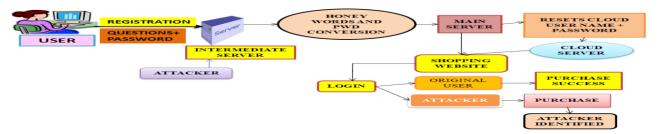


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JA 6003 (DN 10003). Rat Trap: INVITING, DETECTION & IDENTIFICATION OF ATTACKER USING HONEY WORDS IN PURCHASE PORTAL

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, system may be vulnerable to DDoS attacks affecting the whole system. The passwords are easily hacked the hacker using online guessing attacks. In the **PROPOSED SYSTEM**, Honeywords are used to detect Hackers by inducing them for attacking there by DDOS can be avoided. The user has to register with the server and it generates Random set of Passwords to the user called Honeywords. User's Original password is hashed and stored along with the Honeywords. Attacker will fetch any one of the password so that intermediate server will filter the wrong password based queries so that DDOS can be avoided. The **MODIFICATION** is our implementation. Honeywords are generated based on the user info provided and the original password is converted into another format and stored along with the Honeywords. We deploy Intermediate server, Shopping server for purchase and Cloud server for maintaining user account details. Attacker who knows the E mail account of original user can easily reset the password of the cloud server. Attacker is invited to do attack in this Project, so as to find him out very easily. Now attacker logins into the purchase portal, where he is been tracked unknowingly & he is allowed to do purchase. Server identifies the attacker and sends the info to the Original owner and also it blocks the attacker even doing transaction from his original account.

ALGORITHM / METHODOLOGY: Honeyword Generation, E mail Alert DOMAIN: Cloud Computing, Network Security, Society & Social Cause IEEE REFERENCE: IEEE Transaction on Dependable & Secure Computing









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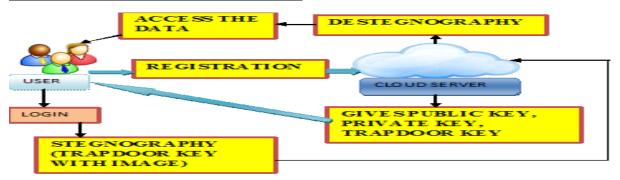


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JA 6004 (DN 10004). Stegno Analysis: INTEGRATION OF MULTI KEYS AUTHENTICATION WITH SECURED STEAGANO GRAPHIC ANALYSIS USING TRAPDOOR KEYS

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, however significantly limits the usability of outsourced data due to the difficulty of searching over the encrypted data. In the **PROPOSED SYSTEM**, Data owner encrypts the data and index using AES encryption sends to cloud server. Also data owner defines access policy for each uploaded file. Server generates a trapdoor of keyword of interest using user's private key and stored in the cloud server. In the **MODIFICATION PROCESS**, during the registration, every user will generate gets public key & private key. Data owner generates set of trapdoor keys and ABE key which are mailed to the user. 3 - 4 Trapdoor keys are generated and everyone is a pair of keys. When server generates 1 key, user has to provide another pair of the key which is made steganography with an image & sent to the server. Server destegano the image and fetches the other pair of the trapdoor key and verifies for authentication. After verification server verifies the access policy for data access through ABE.

#### ALGORITHM / METHODOLOGY: AES Algorithm, Email

**<u>DOMAIN:</u>** Cloud Computing, DIP and Network Security

**IEEE REFERENCE: IEEE TRANSACTION ON** Parallel and Distributed Systems, 2016









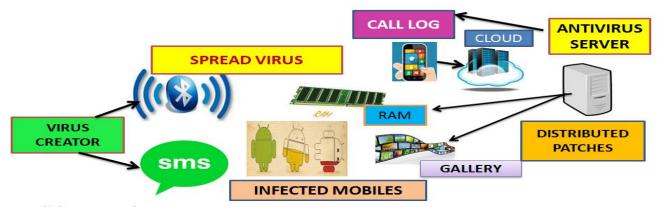
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JA 6005. Scan the Black Hat: DEVELOPMENT OF VIRUS MODELING, PROPAGATION & DETECTION USING ANDROID ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Viruses and malwares can spread from computer networks into mobile networks with the rapid growth of smart cell phone users. The **PROPOSED MODEL**, explains about different scenario of attacks which can steal Our contacts, login credentials, text messages, or maliciously subscribing the user to costly premium services. The **MODIFICATION PROCESS** is our implementation. We Model a Virus which can be downloaded by the normal user via SMS Link or by File transfer through Bluetooth. It decreases the RAM performance and slows down the mobile process Battery Charge is made drastically drained. This application Sends Continuous Predefined SMS. It also fetches IMSI & IMEI Number and stores in the remote cloud. Call logs are transferred to the remote cloud. User's Gallery will also be locked. Once the application detects an abnormal activity, immediately Anti virus patches are distributed and the virus is quarantined.

<u>ALGORITHM / METHODOLOGY:</u> Virus behavior detection DOMAIN: Android, Mobile Computing, Cloud, Security, Society based

**IEEE REFERENCE: IEEE Transaction on Cybernetics, 2016** 









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NJA 2 (NDN 1). ATM Safe - IOT. Open CV Password: INTEGRATION OF TRIANGULAR LOCATION DETCETION, IOT & OPEN CV - USER AUTHENTICATION FOR SECURED ATM

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In the **EXISTING SYSTEM**, User Access & Authentication System functions using Personal Identification (or) Touch Panel based Signature in the form of Password / PIN for Access. In the **PROPOSED SYSTEM**, Bluetooth based Signature is analyzed which user user enters through on screen Software Keyboard. The MODIFICATION which is our Implementation, we are implementing Open CV for User Signature like pattern Recognition. Our implementation is deployed for ATM Loading Vehicle. We deploy 3 Zigbees, one is attached with Vehicle, another is with the Mobile phone of the Authority and the last one is with the ATM Machine. Once all the Zigbees meet together, which means vehicle is at the ATM, and then OTP is Generated and Verified by ATM Zigbee via Vehicle Zigbee. Apart from OTP, User Signature is verified using Open CV before loading cash into the ATM Machine.

ALGORITHM / METHODOLOGY: Triangular Detection, Key Stroke

DOMAIN: IOT, DIP, Embedded, Android, Python, Society

**IEEE REFERENCE: IEEE Transaction on Dependable & Secure Computing 2016** 









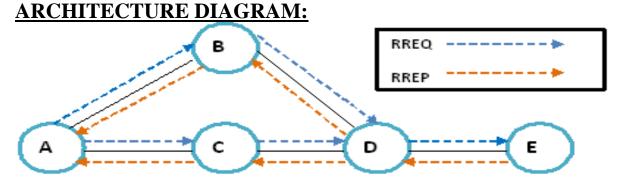
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JA 6006 (DN 10005). Best Node: MULTI PARAMETER ANALYSIS IN IDENTIFICATION OF COOPERATIVE RELAY ROUTING BASED ON CAPACITY, COST & THROUGHPUT IN WSN



**DESCRIPTION:** In **EXISTING SYSTEMS**, performing routing misbehavior, a malicious node can intentionally send unnecessary route error messages to misguide its neighbors and for also increasing the percentage of congestion in the network. In the PROPOSED SYSTEM, We propose sub cooperative route selection algorithm to overcome the pre-mentioned problems. During route discovery, a source node broadcasts an RREQ packet. Once the RREQ is received and verified by the destination node, the destination node assembles an RREP packet and broadcasts it back to the source node based on relay node capacity. Each relay node validates the RREP packet and updates its routing tables. When the source node receives the RREP packet and updates its routing tables. The source node starts data transmissions in the established route. In the MODIFICATION part of the Project, we select best route along with calculating capacity, Cost & Throughput of all the Available Routes. Based on all these factors Best Route is identified & Packets are Transmitted. Packets are encrypted.

**ALGORITHM / METHODOLOGY:** Cooperative Route Selection, Encryption

**DOMAIN: Networking, Security** 

**IEEE REFERENCE: IEEE TRANSACTION ON Networking**, 2016







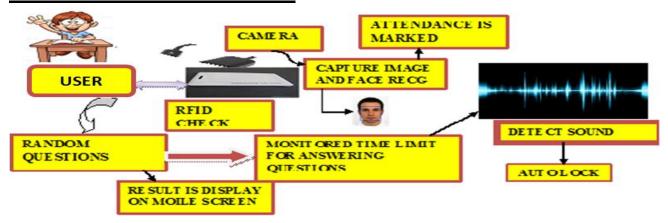




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JA 6007 (DN 10006). Exam Behavior Tracking: EFFECTIVE ATTENDANCE MARKING USING FACE RECOGNITION & RFID, BEHAVIOR MONITORING & PERFORMANCE ANALYSIS - APP ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, Attendance is System is pretty Old Technology to call the names of the Students Manually. Proxy Attendance is quiet comfortably happening in it. In the **PROPOSED SYSTEM**, RFID system is used to monitor the student attendance but has some drawbacks. In the **MODIFICATION** part is our implementation. In the examination hall every student is provided with System and RFID Reader. RFID tag is verified then Camera is initiated and Face Recognition is processed using Matlab. Attendance system is made automatic. After verification, random set of questions are generated to the user. Time limit for answering every question is monitored and buzzer is initiated to the invigilator in case of any malpractice like, Detection of Sound, movement of Student. Finally result is displayed on Screen and the Data is stored in Cloud server.

**ALGORITHM / METHODOLOGY:** Face Recognition, Sound Detection

**DOMAIN:** IOT, Embedded, DIP, Security, Matlab, Society

**IEEE REFERENCE: IEEE Paper on CSVT, 2016** 









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JA 6008 (DN 10007). Disease Predictive, Best Drug: BIG DATA IMPLEMENTATION OF DRUG QUERY WITH DISEASE PREDICTION, SIDE EFFECTS & FEEDBACK ANALYSIS

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, several precautions should be taken in using pharmaceutical drugs, for both healthcare professionals, who prescribe and administer drugs, and for drug consumers. In the **PROPOSED SYSTEM**, side effects and effectiveness, depends on characteristics of patients, such as age, gender, lifestyles, and genetic profiles. Our goal is to provide a tool to assist professionals and consumers in finding and choosing drugs. To achieve this goal, we develop an approach that allows a user to query for drugs that satisfy a set of conditions based on drug properties, such as drug indications, side effects, and drug interactions, and also takes into account patient profiles. The **MODIFICATION** work is the integration of Big Data and Android based input user by any user for easy data analysis process. We also analyze the disease and best drug advised to that specific patient through Big Data analysis. User can post the query through system or through Android Application also. We also arrange appointment to the Best Doctor for the consultation based on user feedbacks.

**ALGORITHM / METHODOLOGY:** Machine Learning, Email

**<u>DOMAIN:</u>** Big Data, Data Mining, Android, Society Based

**IEEE REFERENCE:** IEEE Journal on Biomedical & Health Informatics, 2016









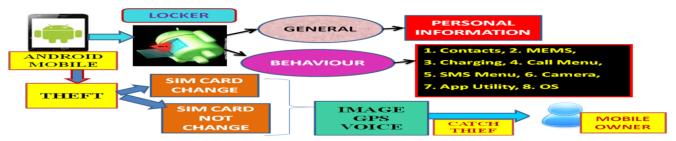
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JA 6009. Secret Lock - Anti Theft: INTEGRATION OF APP LOCKER & DETECTION OF THEFT USING USER PATTERNS ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, However, the answers to many such secret questions is very difficult to remember and it can be hacked also **PROPOSED SYSTEM**, to reveal that the secret questions related to motion sensors, calendar, last charged time, Photo taken, Some contact names, Call Log, SMS log and part of legacy app usage history (e.g., phone calls) have the best memorability for users as well as the highest robustness to attacks. We are using SVM for User Identification. **MODIFICATION** of the project, we are implementing this application as Phone theft detection and prevention of important apps access. User can add multiple apps into our application for the secured access. During registration period, our application will frame a set of standard questions along with the user runtime verifications as specified in the proposed system. If the phone is stolen, ether are only 2 options, either to change the SIM card or to retain the same SIM card and try to access the apps. If SIM Card is changed then automatically GPS, Voice recorder & Camera are initiated, so that Location and Audio uplink are sent as SMS to the alternative number of the user, and Photo is mailed. If he tries to access the secret apps then system will query the user with 4 random questions (2 – from normal questions and 2 from user runtime pattern. If not authorized then camera, GPS & Voice recorder is initiated and sent to the original user for tracking.

ALGORITHM / METHODOLOGY: SVM, SMS, E mail, GPS

DOMAIN: Android, Mobile Computing, Security, Society / Social Cause

**IEEE REFERENCE:** IEEE Transactions on Mobile Computing, 2016









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NJA 3 (NDN 2). Find my Safe Range: IDENTIFICATION OF SAFETY RANGE WITH DANGER ZONE ALERT SYSTEM IN TRIZONAL AREA FOR FISHERMEN SAFETY USING RSSI

#### ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, there is no life security or guarantee provided to the Fishermen People. In the **PROPOSED** system the most important problem for the fishermen during fishing is to track their location in the sea. For this, the sea area is divided into three zones as Safety, Intermediate and Danger Zones for security purposes. In the MODIFICATION part is RSSI system is followed. The boat is allowed to roam anywhere within the safety zone. A buzzer alert will be given to the fishermen if the boat crosses the intermediate zone and danger zone. If the boat crosses the danger zone, the boat will be returned to the safety zone or intermediate zone within 30 minutes. In case the boat is not reached to the safety or intermediate zone within 30 minutes automatically the boat will be stopped, then intimation is sent to the control room for emergency help based on signal strength. The different Ranges are identified using RSSI.

ALGORITHM / METHODOLOGY: Trizonal Area Detection,

DOMAIN: IOT, Embedded, Android, Python, Robotics, Society Based

**IEEE REFERENCE:** IEEE Paper on IEU, 2016







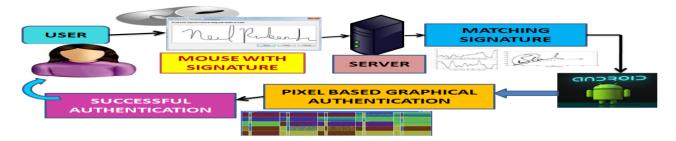




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JA 6010 (DN 10008). Multi Check - Sign: INTEGRATION OF MULTIMODAL VERIFICATION USING SIGNATURE IDENTIFICATION & ANDROID GRAPHICAL PATTERN ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, internet banking applications have become more and more complex, it is unsecure one. In the **PROPOSED SYSTEM**, internet banking when registering the application for the token, a signature or a set of them is scanned and stored in the internal memory of the token. We proposed a new framework for verifying the handwritten signature using conjointly the CT and the feature dissimilarity measure. The verification step is performed using only the feature dissimilarity measure for evaluating signature's resemblance. In the **MODIFICATION PROCESS**, We are implementing Multimodal based user verification system. So we are combining Android based Pattern Authentication System with signature verification. Neural network & Back Propagation Algorithm is used for signature Verification, after successful authentication of signature verification, android based Graphical password is verified. User will be registering with Two Images and with its Pixels. User has to select the same Set of Images and same Pixel Values for Authentication. User is authenticated only if both signature and Android based Graphical Password are matched.

ALGORITHM / METHODOLOGY: Image Pixel & Neural Network

DOMAIN: Android, Mobile Computing, DIP, Security & Society / Social Cause

IEEE REFERENCE: IEEE TRANSACTION ON Information Forensics & Security, 2016









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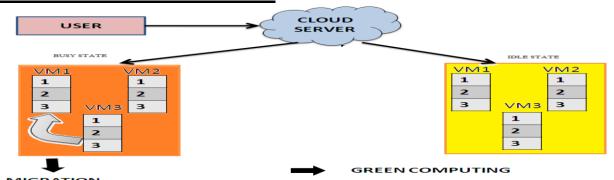






JA 6011 (DN 10009). Green Network - Cloud: ALLOCATION OF RESOURCES & MIGRATION IN CLOUD NETWORK

ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, improper use of Virtual Machine leads to the imbalance load distribution and increasing operation cost. In the **PROPOSED SYSTEM**, Paper speaks about each VM as a two-state Markov chain to capture burstiness, then we design a resource reservation strategy for each physical machine based on stationary distribution of a markov chain. This migration of VM provides a method to distribute physical resource more reasonably without stopping service, so that energy is consumed and operation cost is reduced. The **MODIFICATION PROCESS** is our implementation process. We deploy two types of systems. 1. Hot Machines can handle the current job. 2. Warm Machines are kept idle state until job is assigned. We deploy three Virtual servers for every machine. 1<sup>st</sup> Job is assigned to the Hot machine 1<sup>st</sup> Virtual machine and same way following jobs are assigned to other VMs. Now jobs are assigned to the Warm machines once all the VMs of Hot category have occupied with the jobs. Automatic migration of job is implemented, so as to transfer the load to the Hot VM from Warm VM once it has completed the job. We also implemented cache mechanism.

ALGORITHM / METHODOLOGY: Server Consolidation Algorithm

DOMAIN: Cloud Computing and Green Computing

IEEE REFERENCE: IEEE TRANSACTION ON Parallel and Distributed Systems,

2016









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JA 6012 (DN 10010). Double Layer Key: INTEGRATED VERIFICATION OF RELAY GENERATED NODE KEY & USER BASED MUTUAL WITH ERASURE CONCEPTS

#### **ARCHITECTURE DIAGRAM:**



**<u>DESCRIPTION</u>**: In the **EXISTING SYSTEM**, there is no need for the key generating terminals to obtain correlated observations in channel. In the PROPOSED SYSTEM, we build a secret agreement protocol between the Nodes. For Example Bob & Alice can communicate with Each other with Relay as the Intermediate Medium. Bob & Alice Share their Primary & Secondary Keys to the Relay. Both the Keys are concatenated together and made X-OR by server and Transmits the Corresponding Keys to both of them. This Key is used for Communication. In the **MODIFICATION**, part from the proposed system, Alice sends the data with double encryption. 1st is based on key shared between Bob & Alice and 2<sup>nd</sup> is based on the mutual key generated by relay node. Alice selects the routes for data transmission to Bob based on checking neighbor node capacity. After key assignment and route selection, Alice gives data with first half key (Mutual XOR) to relay. If the keys are match means, relay sends the double encrypted data to Bob based on RC4. Bob sends the encrypted data with second half key to server. Then server check second half key of bob if both keys are match means, server decrypts first layer and sends the single layer encrypted data to Bob. This layer is decrypted using Mutual key between Bob and Alice. If at all Eve hacks the mutual key of Relay, the mutual key between Bob & Alice is not shared, so it cannot hack the data at all. Server also reconstructs the data based on erasure code technique.

**ALGORITHM / METHODOLOGY:** Key Generation, Erasure Code Technique

**DOMAIN: Network Security** 

**IEEE REFERENCE: IEEE TRANSACTIONS** on Information Forensics









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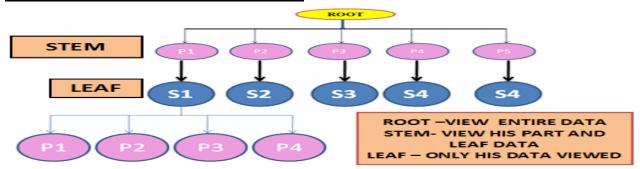


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JA 6013 (DN 10011). Big Virtual Chunks: DYNAMIC DATA PARTITIONING & VIRTUAL CHUNKING FOR EFFECTIVE DATA RETRIEVAL USING BIG DATA & CLOUD

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In the **EXISTING SYSTEM**, Data compression could ameliorate the I/O pressure of data-intensive scientific applications. In the **PROPOSED SYSTEM**, Data is splitted and stored using dynamic virtualization concept and we do not break the original file into physical chunks or blocks, but append a small number of references to the end of file. Each of these references points to a specific block that is considered as a boundary of the virtual chunk. In the **MODIFICATION** which is our Implementation logic, we deploy 3 Layers of connectivity. Root, Stem and Leaf are the layers in our project. Assuming a College Global Data which is entirely stored in the Root layer, Country wise data are classified and stored in the Stem layer and finally State / region wise data are stored in the Leaf layer. ABE based keys are distributed among the corresponding admin so that access policy is applied. This system will store the entire file as such in the root layer and as well as the data is splitted and stored in the other two layers. This process will surely reduce the time for the fetching any results from the table.

ALGORITHM / METHODOLOGY: ABE, Layer Distribution

**DOMAIN**: Big Data, Data Mining, Cloud

**IEEE REFERENCE: IEEE TRANSACTION on Services Computing** 









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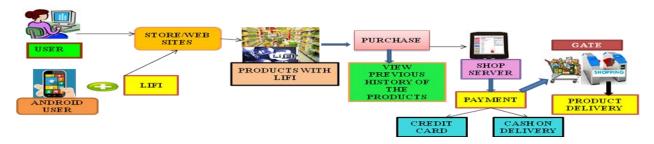


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JA 6014 (DN 10012). Procure Me Easily - Bill: EFFECTIVE AVOIDANCE OF QUEUING & ANALYZING USER BEHAVIOR - ANDROID & IOT

## **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In **EXISTING SYSTEM** RFID and Barcode readers are widely used in real time for shopping. But this technology is not giving the proper solution for long queue while purchasing. In **PROPOSED SYSTEM**, it is just giving the communication establishment between the transmitter and receiver light communication. Queue Sense with clients on smart phones based on Android platforms and a server in the cloud. Smartphone's widely available sensors such as accelerometer, compass and Bluetooth to sense individual activities. The **MODIFICATION** part is our implementation. Android Application is deployed on the Consumer Phone which is attached with LiFi Hardware via OTG. Every Product is attached with LiFi. User will have to show the product in front of the Mobile so that corresponding Product info is automatically updated. This includes Product ID & Cost. LiFi Module is also connected with Trolley. Android user can pay the bill via mobile phone and the details are updated to the shop server. Shop server communicates to the Gate hardware, where another LiFi is connected. Trolley communicates with the Gate section so that the products are packed safely without standing in the queue. Normal mobile users can place the order via computer & cash is paid on COD mode. User's previous purchase & offers are analyzed.

<u>ALGORITHM / METHODOLOGY:</u> LiFi, OTG <u>DOMAIN:</u> Mobile Computing, Android, IOT, Cloud, Embedded, Society

**IEEE REFERENCE: IEEE TRANSACTION on Mobile Computing, 2016** 









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JA 6015 (DN 10013). Best Document - Cloud: CLOUD BASED SECURED TOP RANKED DOCUMENT IDENTIFICATION USING MHT & PRIVACY-PRESERVING KEYWORD SEARCH ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, however significantly limits the usability of outsourced data due to the difficulty of searching over the encrypted data. Security solution mainly focus on the authentication cannot be illegally accessed, but neglect a sublet privacy issue. Also data security and privacy is a major thread in the cloud computing. In the **PROPOSED SYSTEM**, we address this issue by developing the multi keyword ranked search over encrypted data based on hierarchical clustering index. Data owner encrypts the data and index using symmetric encryption algorithm sends to cloud server. Data user gets authorization from owner, cloud server provide top-k documents based on searching encrypted index using merkle hash tree algorithm. In the **MODIFICATION PROCESS**, of this Project is Data is encrypted, splitted and stored in separate Servers. We use replica server for code backup and recovery. TPA is to verify the data.

**ALGORITHM/METHODOLOGY:** Merkle Hash Tree Algorithm

**DOMAIN:** Cloud Computing, Data Mining and Network Security

**IEEE REFERENCE: IEEE TRANSACTION ON** Parallel and Distributed Systems









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JA 6016 (DN 10014). Celebrity Check - New Friends: INTEGRATION OF DETECTION & REMOVAL OF ANONYMOUS IDENTICAL CELEBRITY WITH BEST FRIEND IDENTIFICATION ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, While relentless spammers exploit the established trust relationships between account owners and their friends to efficiently spread malicious spam, timely detection of compromised accounts is quite challenging due to the well established trust relationship between the service providers, account owners, and their friends. In the **PROPOSED SYSTEM**, we propose identification of same user in different social network sites (SNS) and elimination of fake user account from the SNS. This is achieved via checking screen name, photo, friends list, gender, location, birthday and school / college education and working place. Using these behavioral features of user social behavior, it identifies the fake user. In the **MODIFICATION PROCESS**, apart from the removal of anonymous accounts we also add on identification Friends based on user's mind set / Interest. We are monitoring Users Interest, Likes posted by the user and Android based mobility pattern analysis. Best friends are identified and security layer is enveloped by monitoring user's behavior pattern. Vulgar worded posts are removed and the user is terminated in case of misbehavior.

<u>ALGORITHM / METHODOLOGY:</u> CLASSIFICATION ALGORITHM

<u>DOMAIN:</u> Big Data, IOT, Cloud Computing, Android, Security & Society

<u>IEEE REFERENCE:</u> IEEE TRANSACTION ON Information Forensics and Security, 2016









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JA 6017 (DN 10015). Lock the Accused - IOT: EFFECTIVE OF TRACKING OF MISBEHAVIOR DRIVER & OVER SPEED MONITORING WITH EMERGENCY SUPPORT TO THE VICTIM ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, lots of accidents are happening around us, but still very less accident makers are identified. The **PROPOSED** system of the Project is to analyze the driver's behavior. Its measures speed variation, rash driving. This System will identify the reason of Accident occurred. **MODIFICATION** of the Project is our Implementation, Speed of all the Vehicles are monitored. If any vehicle goes beyond the permitted vehicle then warning is given twice to the driver, if speed is continued then mobile camera attached with the vehicle is initiated and photo is taken. Then photo and vehicle details are updated to the server and fine amount is subtracted automatically. Vibration Sensor is attached with the Vehicle is used to detect the accident event. If collusion occurs then automatically Vibration is initiated & buzzer is triggered. If both the drivers of the vehicles turn off the buzzer then it is considered as "Normal". If one vehicle turns off the buzzer and there is no response from another then both the vehicles are made to off state, police is initiated to the 1st vehicle and Ambulance is initiated to the 2nd vehicle. In both the vehicles Camera & GPS is initiated and location info is tracked completely to identity the Hit &Run driver. Life support is provided to the 2nd vehicle.

**DOMAIN:** IOT, Android, Embedded, Society / Social Cause **IEEE REFERENCE:** IEEE TRANSACTIONS on MOBILE COMP.









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JA 6018. Rural Medical ATM: ESTABLISHMENT OF DYNAMIC MEDICAL MACHINE - ACCESS OF BEST DOCTOR, MEDICATION WITH MEDICAL INVESTIGATIONS & THROUGH VIDEO CONFERENCING FROM REMOTE RURAL ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, patient has to go to hospital, take all the necessary tests, consult a doctor, and then buy their prescribed medicine. This takes more time both in the hospital and the medical shop. In the **PROPOSED SYSTEM**, (ATM MEDICAL MACHINE) AMM is to establish a Telemedicine Conference System from the Remote place by both the Distinguished Doctors and Patients. ATM machine like instrument is installed in the Rural place for better Medical Treatment and Diagnosis for the Rural People. The **MODIFICATION** part is our implementation. We deploy the Anytime Medical Counter in all the rural areas where people cannot get good / best doctor on track. We install Heart Beat, Temperature sensor; Ultrasonic sensor, load cell, Camera and Head phone are also connected to the Medical machine. Medical counter user and is monitor from the remote area. Application is installed in both the ends for voice communication & chatting with doctor. Doctor examines the Patient and prescribes the medicines and the Medicine Dispatcher will Dispatch the Medicines from the AMM machine to the user. Medicines are updated in the cloud server. User can send the request to the server to get the tablets intake timings.

ALGORITHM / METHODOLOGY: RTP, Video Conferencing, Voice remind

**DOMAIN: IOT, Embedded, Cloud, Society / Social Cause IEEE REFERENCE: IEEE Paper** on ICECS, 2016.









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JA 6019 (DN 10016). Copy Cat: EFFECTIVE IDENTIFICATION & REMOVAL OF COPY CAT NODES IN WSN

ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Wireless sensor networks are vulnerable to the node clone, and several distributed protocols have been proposed to detect this attack. So they require too strong assumptions to be practical for large-scale, randomly deployed sensor networks. In the **PROPOSED SYSTEM**, using distributed clone detection protocol namely ERCD (Energy-Efficient Ring Based clone Detection) protocol which has two stages: witness selection and legitimacy verification for clone detection. In the MODIFICATION Process, The first one is based on a distributed hash table (DHT) in which Chord algorithm is used to detect the cloned node, every node is assigned with the random key, before it transmits the data it has to give its key which would be verified by the witness node. If same key is given by another Node then the witness node identifies the cloned Node. Here every node only needs to know the neighbor-list containing all neighbor IDs and its locations. We are implementing Chord Algorithm, by location based nodes identification, where every region/location will have a group leader. The Group leader will generate a random number with time stamp to the available nodes in that location. Witness nodes verify the random number and time stamp to detect the cloned node. The message is also encrypted for security purpose.

ALGORITHM / METHODOLOGY: ERCD Protocol

**DOMAIN**: Network Security, Wireless Sensor Network

**IEEE REFERENCE: IEEE TRANSACTIONS** on Mobile Computing









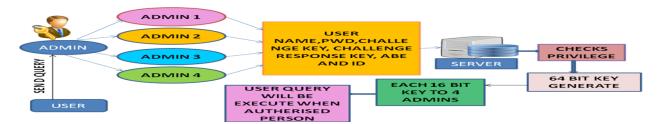


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JA 6020 (DN 10017). Admin Joint Key: INTEGRATION OF MULTI KEY VERIFICATION WITH DYNAMIC ADMIN THRESHOLD KEY GENERATION FOR SECURED CLOUD BANK TRANSACTION

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, the traditional account/password-based authentication is a challenging Task & not privacy-preserving. In the **PROPOSED SYSTEM**, Our protocol supports fine-grained attribute-based access provides a great flexibility for the system to set different access policies according to different scenarios. **MODIFICATION PROCESS** which is our implementation, this project is aimed for a Banking domain. Every user registers and gets a User name & Password for authentication. We deploy 4 admins for the overall control of data access. Every admin is provided with User ID, Pwd, Challenge Key and its corresponding Challenge response Key, ABE key and Bluetooth ID. Every admin is assigned with certain access privilege & ABE key is assigned. Servers generate a new key and divided with the available numbers of administrators. This key is sent as Email alert to every administrator. If any query requested by the user beyond the permitted privilege of the corresponding administrator then that admin will the permission from rest of the administrators by getting everyone's Joint Threshold key and finally concatenated and verified by the server then access permission is provided.

#### **ALGORITHM / METHODOLOGY:** ABE, BLUETOOTH

**DOMAIN**: Cloud Computing, Data Mining, Security

**IEEE REFERENCE: IEEE TRANSACTION ON Information Forensics** 









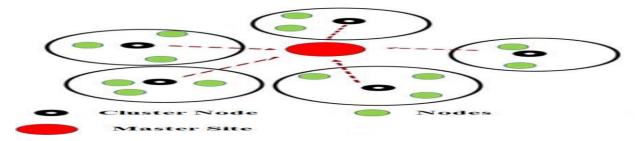
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JA 6021 (DN 10018). Bloom Filter Check: INTEGRATED NETWORK CONSTRUCTION WITH DYNAMIC DATA RETRIEVAL WITH BLOOM FILTER IMPLEMENTATION ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM,** however significantly limits the usability of outsourced data due to the difficulty of searching over the data. It is a time consuming process. In the **PROPOSED SYSTEM,** every cluster comprises a number of nodes. Moreover, there is a master site that has all the files in the data grid. The storage of each cluster node is small therefore cannot accommodate all the files in the data grid. So files need to be brought from other nodes. The requested node checks if the closest node does not have the file, it searches the next closest node. Based on requested file popularity, master site replicate the file to cluster node otherwise clear files from the closest node based on Popular File Replicate Strategy (PFRF). In the **MODIFICATION** part of the project, we are adding Bloom Filter algorithm in order to capture the data in a short forms. This system will avoid the whole data storage in all the nodes same time every cluster node can maintain the Bloom filter index of the entire data stored. This process is very useful in order to fetch the data quickly. Packets are encrypted.

## ALGORITHM / METHODOLOGY: PFRF strategy, Encryption

**<u>DOMAIN:</u>** Networking, Security

**IEEE REFERENCE: IEEE TRANSACTION ON** Parallel and Distributed Systems, 2016









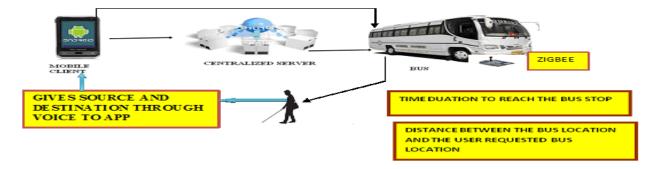
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# JA 6022. Bus to House: VOICE & TOUCH BASED DYNAMIC BUS NAVIGATION SYSTEM BASED ON ZIGBEE, IOT & ANDROID ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, there is no tracking of Buses happening. GPS based Vehicle is only the solution but still arrival Timing of the Buses are not intimated to the bus stop. In the **PROPOSED MODEL**, GPS Hardware is attached in every bus for the continuous tracking of the vehicle. The most important part of this project is to get Buses into passenger's houses as Call taxi is functioning. This system will avoid traditional route of the buses. The **MODIFICATION** Process is our implementation. We deploy an android based application on all customer's mobile and customer can book the bus from their android application either through normal touch based or by Voice. Voice based booking is helpful for the visually impaired people. One Zigbee is attached with the bus and another Zigbee is attached with the server. Android user requests the query specifying Source & the destination to the server. Server will verify the nearest available bus analyzing through buses mobility status via Zigbee. If there is no request for a particular stop bus will dynamically reroutes to another shortest route without crossing that stop.

## ALGORITHM / METHODOLOGY: ZIGBEE

<u>DOMAIN:</u> Android, IOT, Cloud, Embedded, Mobile Computing, Social Cause IEEE REFERENCE: IEEE TRANSACTIONS on Intelligent Transportation









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JA 6023 (DN 10019). Right Review: EFFECTIVE INTEGRATION OF HIGH COST UTILITY, REVIEW ANALYSIS & GROUP NOTIFICATION BASED BEST PRODUCT IDENTIFICATION USING BIG DATA

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION**: In the **EXISTING SYSTEM**, we were using Content based, Collaborative Filtering & Hybrid. But the major problem is we could not come up proper stability with this Recommendation process. In the **PROPOSED SYSTEM**, the paper insist on the cold start recommendation system, user input in social media is considered as the recommendation and the products are then after recommended to the public users. In the **MODIFICATION** part, apart from the proposed system, User recommendations are accepted only after successful authentication of the Transaction ID and OTP to the user along with the Product details. We are using SVM for processing the user Feedbacks. This process ensures that only authenticated person can give the recommendations to friends. We cluster Group of same Product Purchase and recommend others based on group notification if new purchase is made within the Group. Vulgar Words Reviews are filtered and Alerted to the other Users.

ALGORITHM / METHODOLOGY: SVM, OTP, E Mail

**DOMAIN:** Big Data, Data Mining, Society / Social Cause

**IEEE REFERENCE: IEEE TRANSACTIONS** Knowledge and Data Engineering, 2016









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NJA 4 (NDN 3). Ration machine- AVM - IOT: NFC BASED AUTOMATIC DISPENSING GROCERIES WITH CARD TRACKING USING IOT

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In **EXISTING SYSTEM** manual operations are followed like bill payment and supply workers. By using this technology manpower is needed. In the **PROPOSED SYSTEM**, automatic system will be followed. This system provides high reliability and hence no possibility of mistakes. By using this technology manpower is reduced and then avoids smuggling. In our **MODIFICATION**, once the user will swipe the card the OTP is send to the user mobile and then the user enter the OTP on the keypad. After that the user can select our needed things based on authentication. After the verification, the machine will provide the groceries. The user will pay the amount automatically after the selection of materials. For based on online shopping, swipe the tag in mobile via OTG reader, after the verification process is registered and delivered through courier. The purpose of this system is the user will pay the amount automatically after the selection of materials.

**DOMAIN:** Embedded, IOT, NFC, Social Cause

**IEEE REFERENCE: IEEE paper on IDSD, 2016** 









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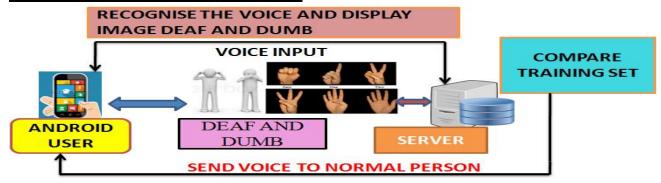


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JA 6024 (NDN 4). Hand Voice: INTEGRATION OF TWO WAY COMMUNICATION USING GESTURE CONTROL HAND MOVEMENTS AND VOICE BASED IMAGE REPRESENTATION USING ANDROID FOR DEAF & DUMB PEOPLE

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, Hardware control achieved using Bluetooth, Zigbee or some other hardware resources. There is no other to control the hardware / Robots using Hand gesture based communication. In the **PROPOSED SYSTEM**, Android based application is deployed and using camera installed in it user Gestures are recognized and accordingly Drone is controlled. The **MODIFICATION** is our implementation. The main objective is to establish the communication process between Deaf & Dumb and the normal person. It is two way communication. We deploy an Android based application where by user will provide gestures & recognized by the server and the corresponding voice is initiated to communicate with the normal person. Normal person can speak out voice is recognized and corresponding image is displayed to the impaired person so that this application can be implemented from the both the end.

**ALGORITHM / METHODOLOGY:** Gesture, Image & Voice Recognition

**<u>DOMAIN</u>**: Android, DIP, Mobile Computing, Society / Social Cause

**IEEE REFERENCE:** IEEE Paper on CIICS, 2016









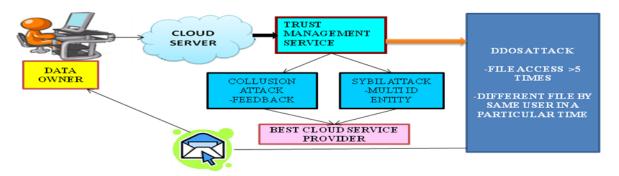
ISO 9001 : 2008 CERTIFIED







JA 6025 (DN 10020). Service Check: EFFECTIVE USER BEHAVIOR ANALYSIS & TRUST MANAGEMENT – IDENTIFY BEST CLOUD ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Although Cloud Computing is vast developing technology. DDOS Attack in a Client Server Environment would Collapse the Entire System. In the **PROPOSED SYSTEM**, cloud service provides layer provides data sharing resources to the user. A trust management service provides an interface between users and cloud services for effective trust management. Trust management service layer is monitoring the load of every service provider and provides resources to the user based on the previous ratings about the service. We are deploying two algorithms namely, Sybil attack (same user will register by providing same E mail ID), Collusion attacks (Attackers will try to provide Feedbacks continuously within short span of time). In the **MODIFICATION**, Data owner uploads the file along with the keywords for retrieval. Both are stored separately. Apart from 2 Attacks we also implement DDOS attack also. 1. Same user sends the same file request for more times within a time frame, 2. Same user requests different files within a short period of time. Email Alert is send to the Owner in case of any attacks happening.

ALGORITHM / METHODOLOGY: Particle Filtering Based Algorithm

**<u>DOMAIN</u>**: Cloud Computing and Security

**IEEE REFERENCE: IEEE TRANSACTION** on Parallel and Distributed Systems









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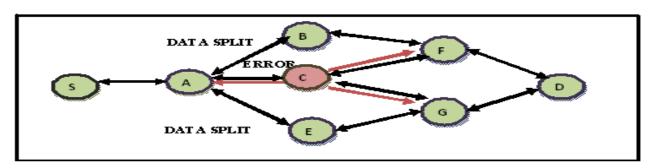


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JA 6026 (DN 10021). Encounter List: INTEGRATIVE DETECTION OF BLACKHOLE AND GRAYHOLE ATTACKS AND DYNAMIC PATH RECONSTRUCTION SYSTEM IN DTN

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, due to the limited connectivity, DTN is vulnerable to black hole and grey hole attacks in which malicious nodes intentionally drop all or part of the received messages. In the **PROPOSED SYSTEM**, we assume trusted authority to assign each node a pair of public and private keys. When two nodes encounter and exchange messages, each of them generates an encounter record for storing sent and received messages between two nodes and their signature and meeting list to store the information for other nodes based on their encounter histories. Which is able to predict future trust values based on monitoring past behaviors of nodes using statistical-based detection of black hole and gray hole attackers (SDBG). Also each node in network monitors the neighbor nodes behavior and it reports to the server. In the **MODIFICATION PROCESS**, On random manner set of dummy packets can be transferred in the network in order to identify the attacker node. We also implement dynamic best route / node construction after removal of attacker node from the network during the data transmission. Packets are encrypted.

**ALGORITHM / METHODOLOGY: SDBG TECHNIQUE, ENCRYPTION** 

**DOMAIN**: Network Security

**IEEE REFERENCE: IEEE TRANSACTIONS** on Mobile Computing, 2016









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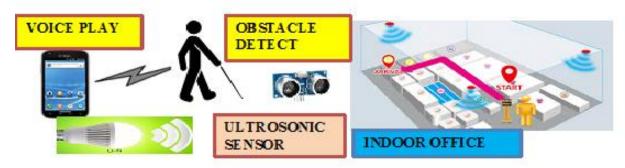


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JA 6027. Blind Walk: INTERACTIVE VOICE & IOT BASED ROUTE NAVIGATION SYSTEM FOR VISUALLY IMPAIRED PEOPLE USING LIFI

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In **EXISTING SYSTEM** to guide the visually impaired people they need neighbors help for navigation and guidance. In **PROPOSED SYSTEM**, LED is deployed in buildings. In this method, colored LEDs are used to help the image sensor to distinguish between different light sources. Zigbee technology can be combined with VLC to realize long distance positioning. **MODIFICATION PROCESS**, The blind person module consists of a mobile connected through LiFi, a vibrator, and an ultrasonic sensor. Ultrasonic sensor will monitor obstacles in the path. LiFi is used to give the zone alert to the blind people and particularly to give the voice guidance of the path. Vibrator is used for sudden alert to the people.

## **ALGORITHM / METHODOLOGY:** Lifi

**DOMAIN**: Mobile Computing, IOT, Android, Embedded & Society

**IEEE REFERENCE: IEEE TRANSACTION on Mobile Computing**, 2016









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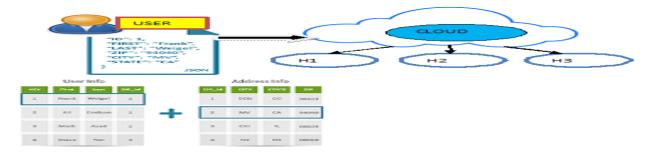


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JA 6028 (DN 10022). Anonymise Double Lock - Big Data:

INTEGRATION OF DOUBLE ENCRYPTION WITH DATA
ANONYMIZATION TECHNIQUE FOR SECURED MEDICAL DATA
STORAGE IN CLOUD & BIG DATA
ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, The privacy and security of the sensitive personal information are the major concerns of the users, which could hinder further development and widely adoption of the systems. In the **PROPOSED SYSTEM**, **MODEL** we aim to apply timing enable proxy re-encryption searchable encryption model to electronic health records (EHR) to formally proved secure against chosen-keyword chosen-time attack. Furthermore, offline keyword guessing attacks can be resisted too. Data owner outsource their encrypted data with time period to EHR storage provider. Proxy server encapsulates time into re-encryption cipher text. **MODIFICATION** part of the project is double encryption with Anomaly is implemented. We implement multiple Hospital records integrated in the Cloud server. Mongo lab is used as Data storage cloud server. Personal information & Medical Data are separately Encrypted & stored in different servers. Medical data is anonymised, Re-encrypted and stored in the main cloud server. Data is transferred / retrieved from cloud server after verifying the OTP. Big Data is used.

ALGORITHM / METHODOLOGY: Proxy Re-Encryption, Anonymise DOMAIN: Big Data, Data Mining, Cloud Computing, Security, Social IEEE REFERENCE: IEEE TRANSACTION on Information Forensics









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JA 6029. Protect Girls - Beast Car: USER BEHAVIOR PATTERN ANALYSIS FOR GIRLS PROTECTIVE MECHANISM WITH EMERGENCY COMMUNICATION & UNLOCKING SYSTEM ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Unfortunately, most smartphone users tend to choose simple and weak pass codes for the sake of convenience and memorability, In the **PROPOSED SYSTEM**, investigates the reliability and applicability on the usage of users' touch-interaction behavior for active authentication on smart phones. Smartphone users have their own unique behavioral characteristics when performing touch operations. These personal characteristics are reflected on different rhythm, strength, and angle preferences of touch interaction behavior. Android Application is developed in which user's Hand Waving Pattern is recorded & Stored as User's Pattern. We are using SVM Algorithm for User Identification. **MODIFICATION** of the project which is our implementation, is same waving pattern is used. We deploy three applications based on the android device mobility pattern. 1<sup>st</sup> one is normal phone unlocking, 2<sup>nd</sup> is Girls / children safety application, 3<sup>rd</sup> is Emergency support to the user. Girl's safety / emergency Pattern is matched both GPS & Camera are initiated to fetch Location and Photos. Voice is Recorded and uploaded to the Server. Both GPS & Audio Link are sent as SMS Alert to both Police & Guardian.

<u>ALGORITHM / METHODOLOGY:</u> SMS, GPS, E Mail, KNN algorithm <u>DOMAIN:</u> Android, Mobile Computing, Society / Social Cause

**IEEE REFERENCE: IEEE TRANSACTION** on Information Forensics & Security, 2016









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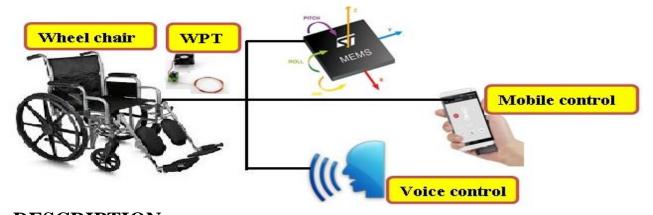


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NJA 5. Hand Drive: IMPLEMENTATION OF WHEEL CHAIR / **SYSTEM** USING **APPLIANCES** CONTROL **MEMS FOR** PHYSICALLY CHALLENGED PEOPLE

#### ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, every physically challenged person depending on the normal persons. In the **PROPOSED SYSTEM**, the Wheel-Chair is controlled to Accident prevention and fall detection. The MODIFICATION part is our implementation is, ultrasonic sensor, heart beat sensor and MEMS sensors are connected. MEMS sensor finds the tilt and makes use of the accelerometer to change the direction of the wheel chair depending on tilt. For

example if the tilt is to the right side then the wheel chair moves in right direction or if the tilt is to the left side then the wheel chair moves in left direction. By using this sensors the physically challenged persons to control the obstacles, fall detection and health checkup. Then this system is followed mobile control and voice control. This concept is proposed to improve the life of the disabled persons. Wireless Power transfer system is used to charge the wheel chair.

**ALGORITHM / METHODOLOGY: Voice Recognition** DOMAIN: Android, Embedded, Robotics, Society Based

**IEEE REFERENCE: IEEE Paper on ICCE, 2016** 











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JA 6030 (DN 10023). Revocate me: MULTI SECURED DYNAMIC DATA SHARING WITH MULTI KEY VERIFICATION & USER BEHAVIOUR ANALYSIS

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In the **EXISTING SYSTEM**, Unfortunately, because of the frequent change of the membership, sharing data while providing privacy-preserving is still a challenging issue. In the **PROPOSED SYSTEM**, Our scheme can achieve fine-grained access control, any user in the group can use the source in the cloud and revoked users cannot access the cloud again after they are revoked. When a new user joins in the group or a user is revoked from the group, the private keys of the other users do not need to be recomputed and updated. The **MODIFICATION** is our implementation. Both Data owner & user registers in the cloud Primary & Secondary Keys are generated. Data Owner will specify the set of permitted users to access the data s well as sets the Access Privilege limits (Read & Write Policy). Mutual Key is generated by concatenating Primary & Secondary keys of both Data Owner & User. Set of passwords are generated and mailed to the Data User based on Challenge Key (CK) & Challenge Response Key System (CRK). After mutual key Authentication, CK is encrypted and mailed to the user. CRK is verified for Data access. Cloud server will verify the Revocation list before allowing. We also implement DDOS Attack detection based on same file request; Read / Write Permission violation for data access.

**ALGORITHM / METHODOLOGY:** Symmetric Encryption Algorithm

**DOMAIN:** Cloud Computing and Network Security

**IEEE REFERENCE: IEEE TRANSACTION ON** Parallel and Distributed Systems









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JA 6031 (DN 10024). Make Me Happy - Mood: SOCIAL MEDIA LEARNING SYSTEM FOR EFFECTIVE MOOD RECOGNITION AND EMOTIONAL PLAY BACK SYSTEM USING SVM, BIG DATA ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, emotion classification concerns approaches to detect the underlying emotion of a text. Many learners rely heavily on the traditional thesaurus because difficulty for language learners in determining proper words. Unfortunately, this fails to provide appropriate suggestions. In the **PROPOSED MODEL**, we propose RESOLVE (Ranking Emotional Synonyms for language Learners Vocabulary Expansion) suggests precise emotion words regarding the events in the relevant context. Patterns are learned to capture emotion events and provides a list of ranked emotion words based on SVM. **MODIFICATION** is our implementation. User feeds in a Social network site, like Twitter or face book like websites. Based on pattern matching algorithm, Bi Data – Hadoop server identifies the main intention of the Emotional Word. Users input data is categorized into Private & Public based on the users permission. Apart from playing songs we also fetch some wonderful memories which were shared by the user previously. User can also Report Spam for Public data so that data can be removed. Android users can also post the data from Mobile and memories / Music is played from the server.

ALGORITHM / METHODOLOGY: PATTERN MATCHING

**DOMAIN**: Big Data, Data Mining, Android, Society based

**IEEE REFERENCE: IEEE TRANSACTION ON** Knowledge and Data Eng.









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NJA 6 (DN 10025). Finger Print Poll: RFID AND FINGER PRINT BASED USER RECOGNITION SYSTEM FOR SECURED VOTING IN AVOIDANCE OF RECASTING & PROXY CASTING

#### **ARCHITECTURE DIAGRAM:**



**DESCTIPTION:** In the **EXISTING SYSTEM**, Voters are Verified using Voter's ID only. Recasting & Proxy Voting is unfortunately irreversible in Real-time. In the **PROPOSED SYSTEM**, RFID is used instead of manual Voter's ID and Results are announced as per schedules. In Our **MODIFICATION**, both RFID & Finger Print is used for User Authentication and register purpose. The people vote is achieved and then the vote is registered. Then the registered vote automatically updated in website through IOT. This process is fully done by a microcontroller. Results are announced on the day of Election itself.

**ALGORITHM / METHODOLOGY: Minutiae** 

**DOMAIN:** Embedded, DIP, Security, Society / Social Cause

**IEEE REFERENCE:** IEEE Paper on IAC, 2016









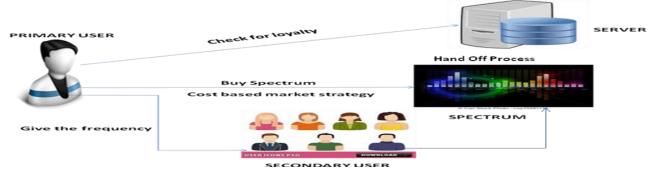
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JA 6032 (DN 10026). Handoff Resource: INTEGRATION OF TWO LAYERS DYNAMIC RESOURCE HANDOFF & IDENTIFICATION OF BEST SERVICE PROVIDER COGNITIVE RADIO NETWORKS **ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In **EXISTING SYSTEMS**, to avoid interference with licensed users, unlicensed users must vacate the spectrum when it is accessed by licensed users. So the transmission delay can be significantly increased. In the **PROPOSED SYSTEM**, we propose a cost based approach to minimize the caching cost, and design delay-based approach to satisfy the delay constraint. Primary users (PU) are the users who are licensed with certain bands of the current spectrum, while Secondary users (SU) do not have the licenses for the utilization of those spectrum bands. In the **MODIFICATION PROCESS,** is our implementation logic. We implement this project by integrating two methods. 1. Request to the server where resource is allotted to the secondary user only when no primary user is available. Handoff scheme is implemented when primary user comes in the picture. 2. Request to the primary user here main server plays a role in fixing the optimum cost & identification of best primary user based on recommendation scheme incentives are provided to the best primary user as well as secondary user who have given the feedback.

ALGORITHM / METHODOLOGY: Handoff, Optimized Cost

**DOMAIN**: Mobile Computing, Networking

**IEEE REFERENCE: IEEE TRANSACTIONS** on Mobile Computing, 2016.











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JA 6033 (DN 10027). Check Street Light - IOT: DYNAMIC CONTROL OF STREET LIGHTS WITH HUMAN MOBILITY, ILLUMINATION, CURRENT SENSING & DUSTBIN REPORTING ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, The higher amount of energy consumption associated with street lights is mainly contributed by the inefficient system, in which luminaries require high amount of energy. In the **PROPOSED SYSTEM**, Intelligent street lights have different sensors to monitor and control luminaries. It includes temperature, luminosity and power metering sensors to control the dimming level and to check the status. These luminaries are networked together in a Zigbee mesh network. In the **MODIFICATION**, Cloud & IOT based setup is implemented. Sensors values are measured by the remote server called Cloud via Zigbee based communication. It detects Power theft. We also include Dustbin Notification along with street light concept. Automatic notification is communicated to the corporation in case of full dustbin. Street light illumination is adjusted or increased whenever people come closer to the lights. Camera is connected and it starts capturing the images whenever humans are crossing the road. This process will reduce continuous capturing storage data. This is used as CCTV Monitoring.

**ALGORITHM / METHODOLOGY: Zigbee** 

**DOMAIN**: IOT, Embedded, Android, Cloud, Society / Social cause

**IEEE REFERENCE:** IEEE Journal on Sensors, 2016









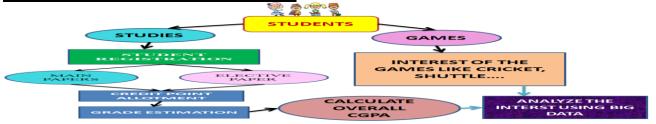
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JA 6034 (DN 10028). Performance Measure: BIG DATA ANALYSIS
OF STUDENTS OVERALL PERFORMANCE ASSESSMENT - CGPA
ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, there is no proper updation for the students and staff when they not turned to college. Also there are no proper access privileges for the staff members. In the **PROPOSED SYSTEM** identified four different types of students, characterized by distinct performance and engagement levels, behavior and gaming traits. Analysis is made for student's data covering both performance measurements and sports performances. **MODIFICATION PROCESS** is, in our implementation. We implement Big Data in this Project for the analytical approach of identifying the Students Performance. Student's performance is analyzed based on two categories, 1. Studies & 2. Games. In the studies category students CGPA marks are analyzed to find the overall performance of the student. Subject integration is also added to find out the interest of the subject category of the corresponding student. In the games category, student's interest is also measured. Admin registers HODs and the staff members. They will register the students & the subjects. They will also from the linkage bonding between subjects. Overall student's performance is measured along with the specific student's interest over 1 category. This application is very useful in finding out overall student's performance in overall category. Also the admin will have the access privileges to add and remove the contents.

**ALGORITHM / METHODOLOGY:** SVM, Naïve Bayes

**<u>DOMAIN</u>**: Big Data, Data Mining, Society / Social cause

**IEEE REFERENCE:** IEEE Transactions on Learning Technologies



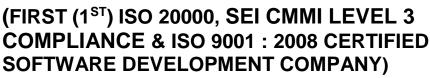






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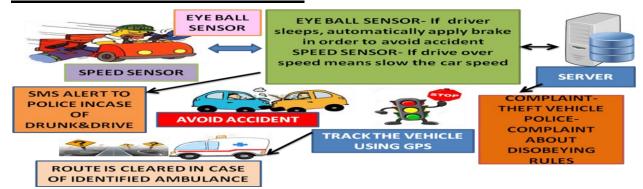






JA 6035 (DN 10029). Drowsy Detect - IOT : PROACTIVE ACCIDENT AVOIDANCE USING DETECTION OF DROWSINESS, ALCOHOL CONSUMPTION & OVER SPEED AND THEFT VEHICLE DETECTION IN SIGNALS USING IOT

#### **ARCHITECTURE DIAGRAM:**



**DESCTIPTION:** In the **EXISTING SYSTEM**, Lots of Accidents are happening due to the Drivers mistake. There is no Preventive Measures has been implemented so far. The **PROPOSED** System of the Project is to avoid Accidents by Detecting Driver Drowsiness through Eye wink sensor. The **MODIFICATION** of the Project is our implementation; apart from detecting Eye wink sensor we also include Alcohol sensing and over speed monitoring. Theft vehicle is also verified in the signals so that information could be communicated to the server. Ambulance vehicle is identified before it approaches the signal so that signal is cleared in that route. SMS is send to the police in case of drunk & Drive.

ALGORITHM / METHODOLOGY: Eye wink, Alcohol, SMS

**<u>DOMAIN:</u>** Mobile Computing, IOT, Android, Embedded, Society

**IEEE REFERENCE: IEEE TRANSACTIONS on Human Machine systems, 2016** 









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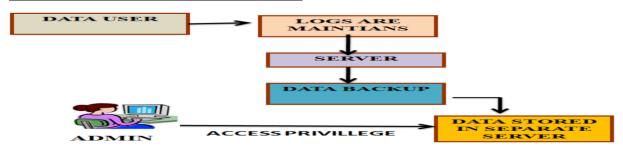


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JA 6036 (DN 10030). Log Check - Backup: TOWARDS BUILDING FORENSICS ENABLED CLOUD THROUGH SECURE LOGGING-**AS-A-SERVICE** 

#### ARCHITECTURE DIAGRAM:



**DESCRIPTION:** The **EXISTING SYSTEM** only store the data in the cloud any user can access the data. However, collecting logs from the cloud infrastructure is extremely difficult because cloud users or investigators have very little control over the infrastructure. In the PROPOSED **SYSTEM** the data is Stored in the Remote Cloud. Additionally cloud server takes a log entry backup in the separate server for provide the proofs of past logs during the verification. Data Owner can share the Data and it's Key to the Permitted Users. Data Sharing is achieved based on user access privilege. In the MODIFICATION PROCESS of the Project is apart from the proposed implementation, we are adding automatic backup process after the approval by the admin. We are maintaining two servers namely File server and Disk server. Data owner will update the data to the file server and authorize the access policies of the users. Users would download, edit or can only view the data based on the access policy. The updated or edited information will be stored in the file server and it will be automatically made backup only on the approval of the admin. Once admin approves the data is made backup in the data server.

**ALGORITHM / METHODOLOGY:** AES Algorithm

**DOMAIN**: Cloud Computing and Network Security

**IEEE REFERENCE: IEEE TRANSACTION ON** Dependable and Secure Comput.











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JA 6037. Vision Speak: EFFECTIVE INTEGRATION OF SMS & EMAIL COMPOSITION USING SPEECH RECOGNIZATION IN ANDROID

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, There is no speech recognition system. The SMS service is simply a digital network facility that allows digital phone users to receive text messages on their digital phones. In the **PROPOSED SYSTEM** SMS is a relatively simple messaging system provided by the mobile phone networks. We propose speech recognition system through android mobile. Speech recognition system will convert the voice commands into Text format for messaging purpose. User can either spell out the sender name or their number and then the content to be sent. Finally message is sent to the receiver. In the **MODIFICATION PROCESS**, We are also including Voice based Email sending also. Same way sender can spell out the name if already e mail Id is stored or their full e mail ID so that mail is sent to them. Blind people could use normal phone using this Application.

**ALGORITHM/METHODOLOGY:** Speech Recognition Algorithm

**DOMAIN:** Android, Mobile Computing, Society / Social cause

**IEEE REFERENCE: IEEE Paper** on ICAHMI, 2016









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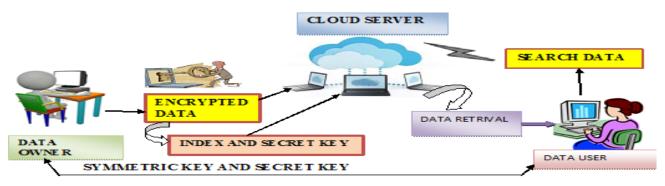


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JA 6038 (DN 10031). A SECURE AND DYNAMIC MULTI-KEYWORD RANKED SEARCH SCHEME OVER ENCRYPTED CLOUD DATA

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In the **EXISTING SYSTEM**, however significantly limits the usability of outsourced data due to the difficulty of searching over the encrypted data. Also data security and privacy is a major thread in the cloud computing. In the **PROPOSED SYSTEM**, The data owner needs to store the unencrypted index tree and the information that are necessary to recalculate the IDF values. we construct a tree-based index structure and propose a "Greedy Depth-first Search (GDFS)" algorithm based on this index tree. The data owner is responsible for generating updating information and sending them to the cloud server. In the **MODIFICATION PROCESS**, of this Project is Data is encrypted, splitted and stored in separate Servers. Data owner encrypts the data and index using AES encryption with secret key are sends to cloud server. Also data owner sends the secret and symmetric keys to data user for authentication and decryption process. Also We use replica server for code backup and recovery. TPA is to verify the data.

**ALGORITHM / METHODOLOGY:** AES algorithm, Symmetric key, Email **DOMAIN**: Cloud Computing, Data Mining and Security

<u>IEEE REFERENCE:</u> IEEE TRANSACTION ON Parallel and Distributed Systems, 2016









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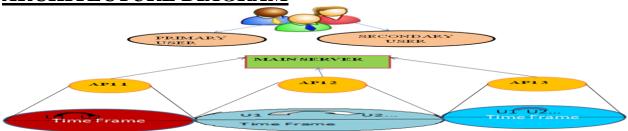


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JA 6039 (DN 10032). Data Provisioning: DYNAMIC DATA TRANSFER & ERASURE CODE IMPLMEMETATION WITH TWO LAYER USER BEHAVIOR IN DTN – SPECTRUM

ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, However, the unstable network topology and limited contact duration in DTNs make it difficult to directly apply data replication schemes. A typical content delivery service would inevitably introduce considerable delay. In the **PROPOSED SYSTEM**, propose to replicate data at the packet level in licensed (Primary User) and unlicensed (Secondary User) spectrum using erasure coding techniques. Contact duration is usually short due to node movement and the limited range of wireless communication. **MODIFICATION PROCESS** is our implementation; Primary (licensed) & Secondary (Free / Unlicensed) users are deployed. Once a request is made by any user, server first verifies the cache server to retransmit the data without disturbing the Access point. If not available, then the request is processed by the AP. AP then verifies the same requested file is already acquired by any users. It will also identify the location of that user. If that user is accessible then the file is transferred by that user until the node is very much available within the accessible range then the balance part of the data transfer is continued by the AP. Always preference is provided to the Primary users, services is shared to the secondary users only when AP is free / Idle. Main server has one back server for data replication using erasure code technique.

**ALGORITHM/METHODOLOGY:** Erasure Code, Mobility Pattern

**<u>DOMAIN</u>**: Networking, Mobile Computing

**IEEE REFERENCE: IEEE TRANSACTIONS** on Mobile Computing, 2016











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JA 6040. Multimode Children Tracking - IOT: BLUETOOTH,
GPS & SOCIAL NETWORK BASED DYNAMIC PARENTAL
CHILDREN TRACKING WITH ALERT NOTIFICATION ANDROID & IOT

#### **ARCHITECTURE DIAGRAM:**



LOCATION WILL BE TRANSMITTED TO PARENT

**DESCRIPTION:** In the **EXISTING SYSTEM**, to identify the Dementia Patients is really very tough. We could not able to monitor them all time. In the **PROPOSED SYSTEM**, Bluetooth Device is connected with the device at all time while discovering neighbor. The **MODIFICATION** part is our implementation. We deploy an Application to track the children. 1 Zigbee device is connected with the android (Parent) and another is attached with the child. Parent can track the child continuously; if child is out the Parent's range then notification is made to the parents automatically. Patient's can share the device ID to the Social Networks. In & around people can also track the child if found in between. We implement Cloud Computing in this project. Once child is identified immediately location details are shared to the parents so that child is identified easily without mind boggling.

**ALGORITHM / METHODOLOGY:** Bluetooth & GPS Tracking

**DOMAIN**: IOT, Android, Cloud, Embedded, Society / Social Cause

**IEEE REFERENCE: IEEE TRANSACTIONS** on Vehicular Technology, **2016** 









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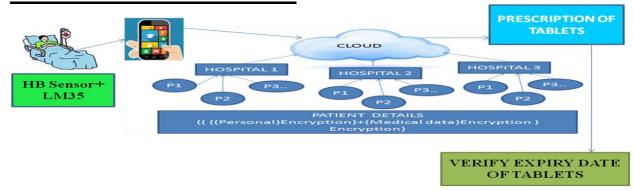


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JA 6041 (DN 10033). Big Data - Hospital: BIG DATA & CLOUD MEDICAL **DATA** INTEGRATION **OF GATHERING** WITH WITH OF **DISEASE** PREDICTION VITAL PARAMETERS ANALYSIS

ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, hospitals are getting overcrowded and are having difficulties in treating the patient even in emergency situation due to increasing population. In the PROPOSED SYSTEM, Vital parameter finding machineries like Heart Beat, BP, and Temperature are connected with the Bluetooth hardware which communicate with the Patient's Android Application. The entire system is connected to the Cloud, Emergency support is provided immediately in case of any emergency. In the **MODIFICATION** part, from the base paper is we are integrating multiple Hospitals connected to the centralized Cloud server. Medical records from different hospitals are stored in the cloud. The main advantage is patient from one hospital visits another hospital then automatically patients records are migrated. We integrate Big Data & Cloud in this Project. Expired tablets are filtered from the distribution by verifying Batch code of the drugs.

ALGORITHM / METHODOLOGY: Data Migration,

DOMAIN: Big Data, IOT, Embedded, Android, Cloud, Society

**IEEE REFERENCE: IEEE Paper on PerCom, 2016** 









PRACTICE SCHOOL



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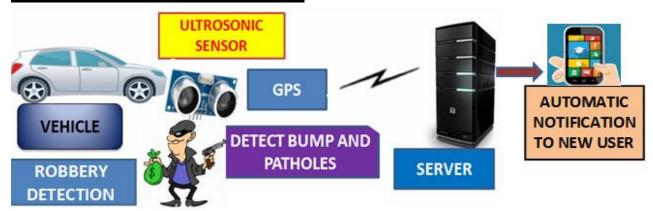


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JA 6042. Potholes & Robbery Detect - IOT: AUTOMATIC POTHOLES, BUMPS AND ROBBERY DETECTION USING ANDROID, GPS & IOT

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, It is very difficult to identify the street Bumps & Potholes in order to avoid street accidents. In the **PROPOSED SYSTEM**, the ideology is to identify the street Bumps via an Android application development. This application will identify the MEMS accelerometer immediate rotation and there by this will report the server along with the corresponding location. In the **MODIFICATION** part, we detect Potholes & Bumps based on Ultrasonic sensor. This system will identify the Potholes & Bumps and transmit the GPS values to the server. Apart from this concept we are also adding robbery detection with respect to a specific location. This information is also updated in the server. New users could verify the route and then can plan to travel.

ALGORITHM / METHODOLOGY: KNN QUERY

**DOMAIN:** Android, IOT, Cloud, Embedded, Society / Social cause

**IEEE REFERENCE:** IEEE Paper on IEEE Access, 2016









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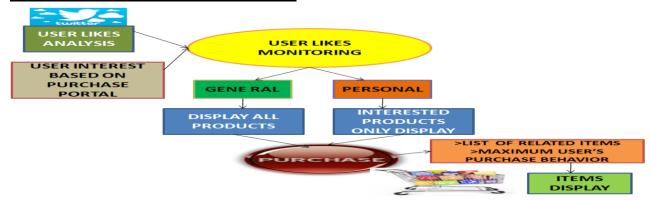


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JA 6043 (DN 10034). Buy Shoppers - Big Data: BIG DATA ANALYTIC APPROACH IN IDENTIFYING HIGH UTILITY PRODUCT WITH USER INTEREST BEHAVIORAL ANALYSIS

#### ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, Tweets, in their raw form, while being informative, can also be overwhelming. it is a nightmare to plow through millions of tweets which contain enormous amount of noise and redundancy In the **PROPOSED SYSTEM**, we are analyzing the overall transaction of all the users and we are extracting maximum profit yielding purchase of frequency item set is analyzed. This process will exhibit the maximum profit based analysis. The **MODIFICATION** part of the paper is we are adding up User profile based Purchase system. Twitter like application is designed where Users Likes in this page & likes in the Purchase website are monitored parallely. Purchase Portal will have two options like General Purchase & Profile based Purchase. In Profile based purchase, Items are displayed based on the User's Interest. Related Items and Items which are purchased more often are also displayed to the user based on the User Interest.

<u>ALGORITHM / METHODOLOGY:</u> TWEET STREAM CLUSING ALGORITHM <u>DOMAIN:</u> Big Data, Data Mining, Society / Social Cause IEEE REFERENCE: IEEE Transactions on Knowledge & Data Eng.









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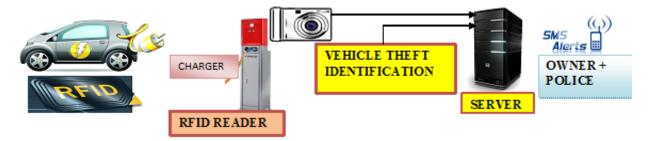


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JA 6044 (DN 10035). Hold The Thief: WIRELESS POWER TRANSMISSION & RFID BASED FLEXIBLE CHARGING AND AUTOMATIC DETECTION OF THEFT VEHICLE

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, we find that if the constraints of node speed and battery capacity are considered, the continuous operation of nodes may never be guaranteed. In the **PROPOSED SYSTEM**, The goal of the work is to make nodes energy provisioned, a vehicle can also move to visiting V2G network for charging /discharging its battery any time at any charging station. A certificate authority also verifies the vehicle's identity for security purpose. The **MODIFICATION** part is our Implementation. We deploy Wireless Power Transmission in Electric Bunks for charging the Electric Vehicles (Like Petrol Bunks). We also deploy Android Application for Reporting Vehicle Theft Complaint. Camera is installed in the charging bunk's system. Once vehicle theft is detected camera is initiated and email alert is sent to the vehicle owner and police. GPS location is sent to both of them. RFID will transmit the Vehicle Number. Server will compare Theft Complaint Vehicle Number with all the Charging Vehicles. If the numbers are matched then automatically location of Electric Bunk is sent as SMS to the Police.

ALGORITHM / METHODOLOGY: WIRELESS POWER, RFID

DOMAIN: Android, IOT, Embedded, Society / Social Cause, Cloud

IEEE REFERENCE: IEEE TRANSACTION ON Information Forensics & Security, 2016









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JA 6045 (DN 10036). Best Suggestion: ANDROID BASED MULTI LAYER SECURITY WITH BEST LOCATION IDENTIFICATION USING DISTANCE PROXIMITY & FEEDBACKS

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, the Queries are made by User Manually, which more time consuming and route is confusing. In the PROPOSED MODEL, Android and Cloud Computing are integrated. Android User makes a Query to the Cloud Server the data can be retrieved on the basis of geo tagged query and checking the privacy profile. The **MODIFICATIONS** part of the project mainly ensures User's location privacy. Exact location is hidden & obfuscation is achieved based on the user's policy status. User's guery is compared with the related / synonyms keywords also. This system will help users to get services nearby also. It will find the best services based on the feedbacks of the previous users.

## **ALGORITHM / METHODOLOGY: Partition Based Algorithm**

**DOMAIN:** Data Mining and Android

**IEEE REFERENCE: IEEE TRANSACTION** on Knowledge and Data, 2016





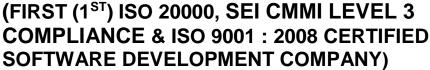




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JA 6046. Ticket Checking – IOT: NRF BASED DEPLOYMENT OF MOBILITY SCANNING WITH ALERT, AUTO MISBEHAVIOR IDENTIFICATION, PENALTY & ANDROID TICKET BOOKING

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, indoor localization, indoor navigation still appears to be a challenging issue. On one hand, wireless signal like Wi-Fi and GSM, the most exploited source for inferring location may not be suitable for navigation purposes. In the **PROPOSED SYSTEM**, Advances in phone technology and new style of computing paradigm i.e., mobile computing permits real time acquisition, processing, and tracking of activities in smart home. In the **MODIFICATION PROCESS**, android application is developed and deployed in every user. User will book the ticket for the destination and transaction id is generated for it via citizenship card. LiFi Hardware is attached at every station & in mobiles. User's mobility is tracked completely. Once user reaches the destination, a Normal / Voice alert is provided. User can terminated the travel or continue the travel. If user is continuing the travel then amount is subtracted from the account. If the travel is continued without payment then double the times charges is reduced. Auto SMS alert to the ticket checker in case of travel by a passenger without ticket. Emergency health support is also provided to the station through the Application.

**ALGORITHM / METHODOLOGY:** NRF, SMS Alert

**DOMAIN:** IOT, Android, Embedded, Society / Social Cause

**IEEE REFERENCE:** IEEE Paper on CCNC, 2016





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JA 6047 (DN 10037). Role policy Access: INTEGRATION OF MULTI USER KEY MANAGEMENT WITH POLICY PRIVILEGE PLOCIES USING ABE IN CLOUD & BIG DATA

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, However, security has then become a greater concern. Among many other security issues, user and server authentication within an open, distributed, and cross-domain environment are a complicated matter. Security is the major thread in Cloud Computing. In the **PROPOSED SYSTEM**, Every user has to feed User Name, Password for Data access. Server generates the set of Keys to the Users for Data Access. Data owner uploads their data with index in server. Server split and stores the owner data in different sub-servers. ABE is used as data access policy. In the **MODIFICATION** Integration of Cloud & Big Data is achieved. Main cloud chunks the User data and stores in different sub Cloud servers. Admin generates Policy Key (View / Modify) based on the User's Profile. If any user tries to misbehave an immediately Alert is communicated to the Data Owner. Data Owner can change the Policy Key and Access Policy in run time. Our System should able to update its policy automatically. We are implementing ABE Algorithm for Profile based Data Access.

#### **ALGORITHM / METHODOLOGY:** ABE Technique, Email Alert

**DOMAIN:** Big Data, Cloud Computing, Security

**IEEE REFERENCE: IEEE TRANSACTION ON** Parallel and Distributed Systems









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JA 6048 (DN 10038). Hospital Monitor: INTEGRATED PATIENT & HOSPITAL MONITORING WITH EFFECTIVE SUPPORT SYSTEM USING ANDROID & IOT

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, the monitoring of patients is carried in particular time 24 hours monitoring is not possible. In the **PROPOSED SYSTEM**, monitors the patient vitals such as temperature, heart rate. The **MODIFICATION** part is our implementation. Temperature, Heart Beat sensors are connected along with Zigbee to the Patient and Temperature, Fire & Gas sensors are connected along with Zigbee with the room to identify any fire accidents. Another Zigbee is attached with the Server for further analysis. If health related issues then the request is forwarded to the doctor, same way infrastructural issues the request is forwarded to the Nurses / Admin. Both the values are updated in the server. Doctor is notified with Medical values of the Patient, Room No., available nurses & Doctors on duty, previous history of the patient and same way Room Parameters values, Room details, nurses & Doctors on duty are notified to the Admin. Doctors & Nurses are intimated with the corresponding medicines with SMS notification and same Nurses are advised by the admin in charge.

**ALGORITHM / METHODOLOGY: SMS Alert** 

DOMAIN: IOT, Cloud, Android, Biomedical, Embedded, Society

**IEEE REFERENCE: IEEE Paper on IJB&HI, 2016** 









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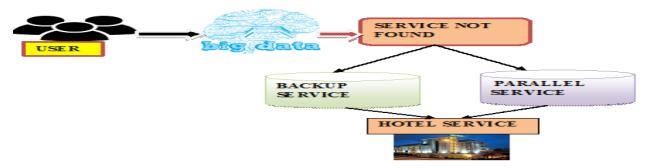


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JA 6049 (DN 10039). Travel Sequence: DYNAMIC USER DATA ANALYSIS AND WEB COMPOSITION TECHNIQUE USING BIG DATA

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, we building a reliable service oriented systems is more important when compared with the traditional stand alone system in the unpredictable internet service and it also a challenging task to build reliable web service. In the **PROPOSED SYSTEM**, we find the fault tolerance by using heuristic algorithm which is proposed. Two kinds of strategies active and passive strategies. And we also formulate the user requirement as local and global constraints. The **MODIFICATION PROCESS** is our implementation. We deploy two bus reservation and two train reservation service along with hotel reservation service. User specifies their Source & Destination to a service provider of the web service, then verifies the availability if yes then the same SP will provide the resources, if No then the request is forwarded to the Backup Service "Another SP", if not available there also then Parallel service is initiated. Automatic hotel reservation is also initiated based on the mode and type of travel of the user.

ALGORITHM / METHODOLOGY: Greedy algorithm

**DOMAIN:** Big Data, Networking, Web service

**IEEE REFERENCE:** IEEE TRANSACTION on Big Data, 2016









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JA 6050. Blind Remainders: INTEGRATION OF VOICE BASED REMAINDER SYSTEM WITH EMERGENCY ROUTING USING ANDROID

#### ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, However difficulties in interacting with a touch screen for visually impaired people ,manual device control is followed yet now in industries. Automatic device control is very challenging task. In PROPOSED SYSTEM, develop an electronic calendar app that provides interaction via voice commands, keyboard and touch. Our goal is to create an accessible mobile application that was capable of interaction through voice commands and multitouch for visually impaired users and low vision users. The functionalities listed and developed are: creating, deleting, editing and reading appointments, filtering for easy appointment search and the possibility to use voice commands for creation and editing. In the MODIFICATION PROCESS, we also include "Emergency" option, where normal user can click on it or Voice alert is compared for visually impaired people, then "GPS" is initiated and sent as SMS alert to both Guardian and to the Hospital / Doctor. Automatic call is also initiated after sometime with prerecorded message.

**ALGORITHM / METHODOLOGY: Voice Playback** 

**DOMAIN**: Mobile Computing, Android, Society / Social Cause

**IEEE REFERENCE: IEEE Paper** on ICSS, 2016









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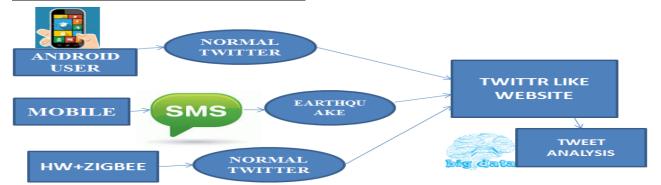


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JA 6051 (DN 10040). Emergency Alert - IOT: MULTI CHANNEL EMERGENCY DISASTER DATA EXTRACTION FROM SOCIAL FORMS USING BIG DATA & IOT BASED ANALYSIS

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, the free format of social media that allows anyone and everyone to post just about anything make it difficult to find relevant information. The other issues are misinformation and rumors spread centering a disaster, collection of accurate information. In the **PROPOSED SYSTEM**, SMS alert is sent to the respective users who belong to a community / group. After they accept for the communication in the social networks then they can post their information and finally published. In the **MODIFICATION**, apart from the proposed system, Android based SMS based social network communication is initiated. Android based normal internet social network communication is also initialed to obtain the overall opinion about a particular issue. We also deploy a Zigbee based IOT communication establishment, applicable when mobile network is not present. We are also integrating Big Data in this application also. Big data is used for data analysis about the public opinion.

ALGORITHM / METHODOLOGY: Zigbee, Email, SMS

**<u>DOMAIN</u>**: Big Data, Data Mining, IOT, Embedded, Android

**IEEE REFERENCE:** IEEE Paper on CASPSC, 2016









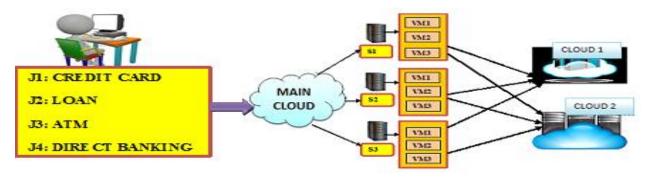
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JA 6052 (DN 10041). Load Virtualize: BIG DATA DEPLOYMENT FOR RESOURCE PREREQUISITE, JOB ANALYSIS FOR EFFECTIVE PERFORMANCE IMPROVEMENT ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Integration of Cloud & Big Data is the most challenging task to handle. To estimate the amount of resources to complete their jobs this is a highly challenging task. In the **PROPOSED SYSTEM**, Virtualization is implemented for effective data Processing Hadoop jobs normally involve multiple processing phases including three core phases (i.e., map phase, shuffle phase and reduce phase). The proposed model builds on historical job execution employs Locally Weighted Linear Regression (LWLR) technique to estimate the execution time of a job. The **MODIFICATION** is our Implementation. We deploy Two Clouds for handling 4 Jobs like Credit Card, Loan, ATM and Direct Banking. We develop this Application for banking. We also achieve Virtualization in our Local Machine. We can add or remove VMs in those machines based on the number of request handled by the main Cloud Server. There will be minimum one VM and maximum 3 VMs are assigned per Server.

**ALGORITHM / METHODOLOGY:** LWLR Technique

**DOMAIN:** Big data, Cloud Computing, Networking

**IEEE REFERENCE: IEEE TRANSACTION ON** Parallel and Distributed Systems, 2016









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JA 6053 (DN 10042). Calorie Calculator - IOT: ANDROID & IOT BASED CALORIE CALCULATOR USING MEMS, VITAL PARAMETER MONITORING AND AUTOMATIC REMAINDER SYSTEM

#### ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM** there is no system for analyze step count and medical fitness analysis together. In **PROPOSED SYSTEM**, is trying to calculate the temperature and heartbeat measurement to be taken for mood recognition. In our **MODIFICATION** part, we include MEMS based Hardware for measuring step count and calorie burnt in the human body and further blood pressure is measured and updated status to be stored in cloud server. Remainder notification is also included to alert the people to remind all, similarly which location to buy the material or shop information using Bluetooth.

**ALGORITHM / METHODOLOGY:** Bluetooth, Remainder System

**DOMAIN:** Android, IOT, Embedded, Society / Social Cause

**IEEE REFERENCE: IEEE Paper** on **IWSSAS**, 2016









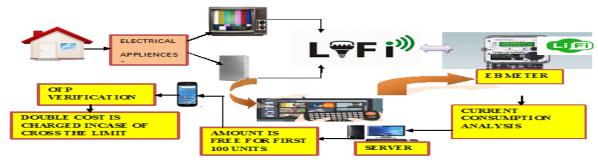
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# JA 6054 (DN 10043). EB Check: SYSTEMATIC ROLE CHECK WITH HUMANLESS AUTO METER READING USING LIFI ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Consequently, the insider attacker can get access to modify meter readings and can view private information of the customer at the customer endpoint. Similarly, insider attacker may be able to access the electricity price information, network infrastructure information, and other information communicated by protocols. Smart Meters plays a vital role in measuring energy consumed by every user with device details. In the **PROPOSED SYSTEM** we first identify role of user and verify identify of each user with signature verification. Then OTP sent to user mobile phone for verify the actual user. Finally a shared secret key is generated between user and device for secure communication. After authentication, user view and pay their EB bills through remotely. In the **MODIFICATION** part of the Project EB Meter is interfaced and the Meter Data is transmitted EB Server through LIFI Technology. Current Sensor is connected to the device to verify the switching state of the device. Android Application is deployed to the customer for Payment System. Server calculates the cost of remaining units based on government scheme free for first 100 units. Double Cost is charged in case of crossing Permitted maximum utility of Current.

ALGORITHM /METHODOLOGY: LIFI, SMS & ABE

**DOMAIN**: IOT, Android, Embedded, Security, Society / Social Cause

**IEEE REFERENCE: IEEE TRANSACTION** on Information Forensics and Security, 2016









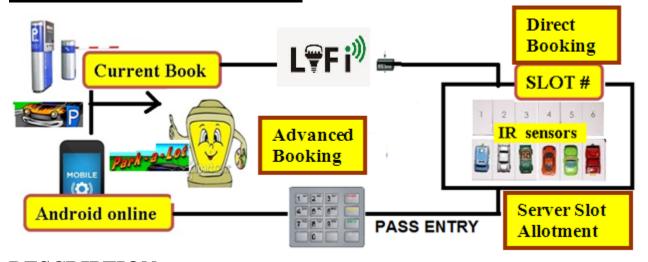
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JA 6055 (DN 10044). Vehicle Park - IOT : SMART PARKING SYSTEM FOR INTERNET OF THINGS ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, Parking is the major Problem nowadays. Many of us get disturbed easily of not parking the Vehicles. In the **PROPOSED SYSTEM**, user can park the Vehicle through Android Application in advance itself. Android user can choose the Route based on the Parking Space availability. On the Embedded Hardware end, an Intelligent Parking is implemented based on Slot Allotment. In our **MODIFICATION**, Android user can book the Parking Slot in two Modes like Advance & Current Booking. User can choose the Destination and the Route so that user can park the Vehicle very easily. User can pay the Money through Android Application itself. Embedded Hardware is implemented for Direct Parking. Server will monitor the Slot Allotment dynamically.

**ALGORITHM / METHODOLOGY:** LiFi, SMS Alert

**DOMAIN: IOT, Android, Embedded, Society / Social Cause** 

**IEEE REFERENCE: IEEE Paper on ICCE, 2016** 









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JA 6056 (DN 10045). Mobile WPT - Robot: INTEGRATION OF SOLAR RENEWABLE ENERGY SOURCE WITH DYNAMIC WIRELESS POWER TRANSFER IN RECHARGING IR BASED RECEIVERS

## **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, limited energy at each node in wireless sensor networks (WSNs) is known to be the major hurdle in their design and operation. Wireless power transmission is still in a research process. In the **PROPOSED SYSTEM**, we consider a common scenario where the charger travels along a pre-planned trajectory and determine the optimal velocity of the charger subject to a given traveling time constraint, such that the network lifetime is maximized. Specifically, we aim to maximize the minimum charged energy among all nodes in the network. In the **MODIFICATION** part, we construct a Robot which is charged using Solar panel, Wireless Power Transmitters & IR Sensors are connected with it and starts transmitting the Power wirelessly by identifying the receiver based on IR Sensors. Even Mobiles can also be charged. Robots are controlled Mobile.

ALGORITHM / METHODOLOGY: Wireless Power, Robot, IR Tracking

**DOMAIN**: IOT, Android, Robotics, Embedded, Society

**IEEE REFERENCE:** IEEE Transaction on Mobile Computing, 2016









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JA 6057 (DN 10046). Android Poll: DATA GATHERING, CUMULATIVE AND PREDICTIVE ANALYSIS USING IG DATA & ANDROID

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In the **EXISTING SYSTEM**, Data Aggregation assumes a Trusted Aggregator hence it cannot protect with Untrusted Aggregator. In the **PROPOSED SYSTEM**, focus on boosting election prediction accuracy and rating records among the social media. In the **MODIFICATION** part Android Mobile user Registers with the Server by answering set of Secret Questions and also gets User Name, Password, Encryption Key. The main Aim of the Project is to collect Public Opinion on any Issues with User Security & Privacy using homomorphic algorithm. Secret Questions are categorized into 4 − 5 Types and Secret Keys are extracted accordingly and Stored in the Server. The Opinion is encrypted by User using Key1 and further Encrypted using Key generated by the Server based on the Questions. Server Decrypts the Data and Counts for the Opinion Poll. Implementation of opinion data aggregation with privacy protection using android. The opinion is encrypted using AES algorithm and the secret questions are answered using homomorphic algorithm. We also obtain business model strategy be getting best product names along with opinion from the user.

<u>ALGORITHM / METHODOLOGY</u>: AES, Homomorphic, Business Model

**DOMAIN:** Android, Security, Society / Social Cause

**IEEE REFERENCE: IEEE PAPER** on CCNC, 2016









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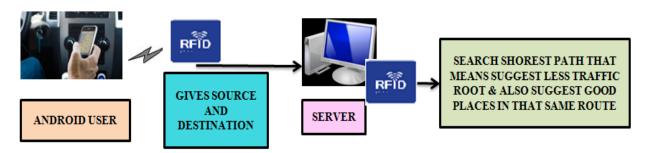


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JA 6058 (DN 10047). Short Route: TIME PREDICTION ANALYSIS
BASED ON RFID TECHNOLOGY & ANDROID DEPLOYMENT
WITH RECOMMENDATION SYSTEM

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, automatic vehicle identification (AVI) systems like license plate recognition must wait until a vehicle is detected at the destination to calculate its travel time. There is no effective technology for estimating travel time in existing and time consuming process. In the **PROPOSED SYSTEM**, using Bluetooth in intelligent transportation systems to calculate travel time to perform traffic light management, suggest alternative routes to avoid work zones that the vehicle stays within range long enough. The **MODIFICATION** is our implementation. Our goal is to proactive traffic sensing on road. We deploy Android based Application to understand the estimated time required to reach the destination in all the available set of routes. So that user can easily identify the best route to reach the destination on time. User has to provide reason for travel, so that server can easily fetch the related places can be visited by the user in between this travel. Places Recommendation is purely based on the feedbacks posted by the previous users.

#### **ALGORITHM / METHODOLOGY:** RFID, Travel Time Estimation

**DOMAIN:** Android, IOT, Embedded, Society / Social Cause

**IEEE REFERENCE: IEEE TRANSACTION ON** Intelligent Transportation









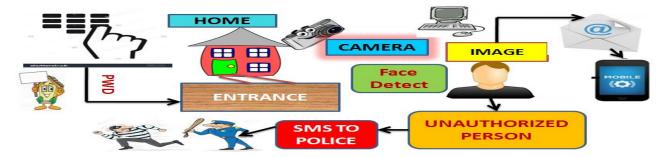
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JA 6059 (DN 10048). Open The Door: DEVELOPMENT OF INTELLIGENT SURVEILLANCE WITH INTRUDER TRACKING USING ANDROID ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, home security is not widely used by public in some houses they prefer password door. In **PROPOSED SYSTEM**, An automatic fire detection and warning system has been designed using video camera. By using this system warning message only reached the public. In the **MODIFICATION**, which is our Implementation, if authorized person enters the house, camera captures the image & then the Password is verified THROUGH WIFI and finally door is opened. If unauthorized person enters the house then he will either press a Button or the camera will capture the image and sends to the Authority. Authority can allow the new user by sending Key through Android App or simple SMS using GSM. In case if the person is found unknown by the authority, then information is forwarded to the police with specify location of the house. This system includes temperature and smoke sensor. By using this system automatic fire detection and fire extinguishing method will be followed. This method is also includes device control like on and off system.

**ALGORITHM / METHODOLOGY:** Open CV, SMS

**DOMAIN:** Android, IOT, Embedded, Open CV, Python, Society Based

**IEEE REFERENCE: IEEE** Journal on Sensors, 2016









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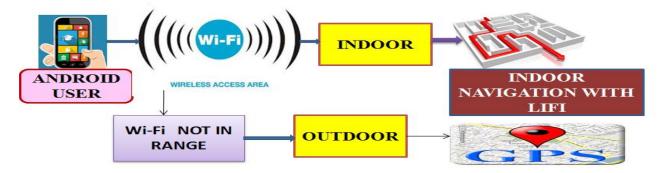


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JA 6060. WiFi Track - IOT: DYNAMIC PATH GUIDANCE - INDOOR & OUTDOOR USING WIFI COMMUNICATION USING ANDROID & IOT

#### ARCHITECTURE DIAGRAM



**<u>DESCRIPTION:</u>** In the **EXISTING SYSTEM**, there are GPS based tracking is very common in the entire smart phone, but in door navigation is the most difficult opportunity and because of the widespread use of mobile devices and location-based applications, indoor localization is becoming a top research priority. In the **PROPOSED SYSTEM**, we are integrating both Indoor & Outdoor location based tracking basis on monitoring the WiFi connectivity. If WiFi is connected then tracking will happen as Indoor and user is out of the WiFi then GPS is used for external tracking. The **MODIFICATION** part of the project is to include Voice based input for blind people. The same application can be used for both normal & Blind people for effective navigation.

ALGORITHM / METHODOLOGY: WiFi, GPS Tracking

DOMAIN: IOT, Android, Embedded, Society / Social Cause

**IEEE REFERENCE: IEEE Journal** on IOT, 2016









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JA 6061 (DN 10049). Opinion Poll: BIG DATA IMPLEMENTATION OF UNSTRUCTURED DATA ANALYTICS OF SOCIAL NETWORK REVIEWS USING SENTIMENT ANALYSIS & SVM

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, We notice that these sentiment dictionaries have numerous inaccuracies. We could not able to principally categorize the Opinion Results. In the **PROPOSED SYSTEM**, Sentiment based analysis is the major key in categorizing the user's Feedback. We are using FSM & EEM Algorithm for the Word processing process. In the **MODIFICATION** Process, Twitter like Application is created and users Tweets are processed. We are implementing Big Data in this Project. Users Tweets are the input to the Big Data HDFS System. Data are stored in the Data Nodes. Index is maintained in the Name Node. Tweets are clustered and classified based on Keywords extracted. Tweets are analyzed using Sentiment Analysis and Positive & Negative Tweets are classified. Map & Reduce is also implemented.

**ALGORITHM/METHODOLOGY:** Sentiment Analysis, SVM

**DOMAIN:** Big Data, Data Mining, Society / Social Cause









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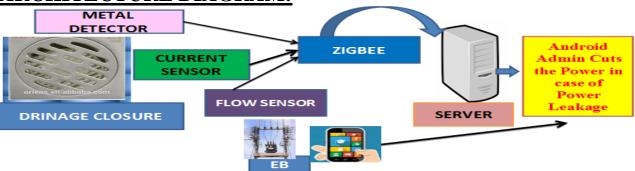


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JA 6062 (DN 10050). Drain Verify - IOT: INTEGRATIVE DETECTION OF OPEN DRAINAGE, OVER FLOW AND CURRENT LEAKAGE AND CONTROL SYSTEM USING ANDROID & IOT

**ARCHITECTURE DIAGRAM:** 



**DESCRIPTION:** In the **EXISTING SYSTEM**, intimate the overflow of drainage disconnected electrical line fall in rainy season, dustbin full is not done immediately. In PROPOSED SYSTEM overflow electrical transformers high and low voltage and current analysis. In MODIFICATION concept is designed to monitor the sewage system in roads during rainy seasons to protect people from falling into the open drainage, metal detector is used to monitor lid opening or closing. Float sensor monitor the over flow of sewage water. Current and Voltage sensor is measured high and low voltage of transformer and also detects the disconnection in the electrical lines. With this devices alarm is created to aware public. The ZigBee module in the lamp post is used to transfer the information to the central controller fixed in the area transformer to intimate EB. In addition to this, Drainage garbage full notification also intimated to corporation through ultrasonic sensor. SMS alert is passed to the Administrators in case of any abnormality.

ALGORITHM / METHODOLOGY: Zigbee, Location

**DOMAIN: IOT, Embedded, Society / Social Cause** 

**IEEE REFERENCE: IEEE Paper on ISGCAC, 2016** 









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JA 6063 (DN 10051). Mobile Access Control - IOT: ANDROID POLICY BASED USER BEHAVIOUR MONITORING, CONTROL WITH LOCATION BASED DYNAMIC MODE CHANGING

#### **ARCHITECTURE DIAGRAM:**



**DESCRIPTION:** In the **EXISTING SYSTEM**, the majority of these resources can collect sensitive data and may expose users to security and privacy risks if application use them in appropriately and without the user's knowledge. And misuse of this data by malicious application may result in privacy breaches and sensitive data leakage In the **PROPOSED SYSTEM**, the android application provide the access permission manually and automatically based on the policy rights given by the mobile user based on the location. This Access control mechanism for context differentiates between closely located sub areas within the same location. In the **MODIFICATION PROCESS**, modification is our implementation. Android based application is deployed and access policy is determined based on their location. If user goes to conference hall their android phone automatically goes to the silent mode. User can control / view device options inside the premises. User can control door operations while exit. Authority person can shut down, restart, logoff any client's machine as we include ABE algorithm.

**ALGORITHM / METHODOLOGY:** ABE, Bluetooth Pairing

**DOMAIN**: Android, IOT, Embedded, Mobile Computing, Society based

**IEEE REFERENCE:** IEEE Paper on REV, 2016









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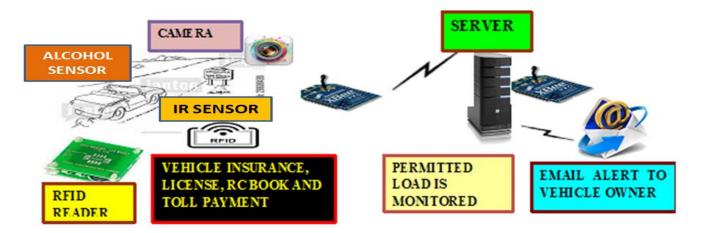
ISO 9001 : 2008 CERTIFIED



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JA 6064 (DN 10052). Vehicle Check - IOT: AUTOMATIC TOLL PAYMENT, LOAD & VEHICLE INFO MONITORING USING IOT & MAILING SYSTEM ARCHITECTURE DIAGRAM



**DESCRIPTION:** In the **EXISTING SYSTEM**, manual paper work regarding the overall details. In the **PROPOSED SYSTEM**, implementing data collection and images are displayed. The **MODIFICATION** part is our implementation, RFID tags are attached with every vehicle. Vehicle's Insurance, License & RC book details are transmitted via RFID card. This system will automatically identify the vehicles without proper Papers. Alcohol sensor is attached with the vehicle to automatically identify the drunken driver. IR sensor & Load cell is attached with the Toll gate so that Vehicle's load is monitored and corresponding fair is charged. Permitted load is only allowed, if over load complaint is registered. The camera captures the snap of the vehicle and transferred to the consigner via e mail.

**ALGORITHM / METHODOLOGY:** E mail Alert

**DOMAIN:** IOT, Embedded, Society / Social Cause

**IEEE REFERENCE: IEEE Paper on ICBD&SC, 2016** 









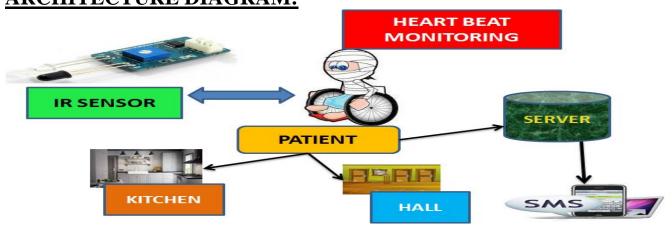
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JA 6065 (DN 10053). Mobile Patient's Track - IOT: APRIVACY PROTECTION FOR WIRELESS MEDICAL SENSOR DATA ARCHITECTURE DIAGRAM:



**DESCRIPTION:** In the **EXISTING SYSTEM**, there should be some Care Taker along with the Patient who personally monitors the Age Old Patients. In the **PROPOSED SYSTEM**, Smart home is regarded as an independent healthy living for elderly person. Advances in phone technology and new style of computing paradigm (i.e., cloud computing) permits real time acquisition, processing, and tracking of activities in smart home. In this paper, we develop android smart phone application to assists elderly people for independent living in their own homes. Smart phone application communicates with cloud through web server and assists the elderly person to complete their daily life activities. This is used to Track the Patient's Activity along with the Remainders of Medicines, Food and other Activities. **MODIFICATION** that we propose is to monitor the Heart Beat of the Patient to find the normal functionality of the Patient along with IR based Tracking Solution at every room.

<u>DOMAIN:</u> IOT, Android, Embedded, Wireless, Society based <u>IEEE REFERENCE:</u> IEEE Transaction on dependable and secure computing, 2016









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#### **IEEE 2015 PAPERS**

JA 6066 (DN 10054). Multi Cloud Multi Purpose Smart Card: IMPLEMENTATION OF MULTI CLOUD WITH BIG DATA FOR SECURED MULTI PURPOSE SMART CARD

**DOMAIN:** Big Data, Cloud Computing, Embedded, Society based, IOT

JA 6067 (DN 10055). Secure Onion: SECURE INTER HOP VERIFICATION WITH ONION PROTOCOL IMPLEMENTATION FOR RELIABLE ROUTING IN WSN

**DOMAIN:** Network Security

JA 6068 (DN 10056). Identify Source: IDENTIFICATION OF SOURCE ATTACKER NODE (PROVENANCE FORGERY) USING BLOOM FILTER WITH EFFECTIVE IP TRACE BACK

**DOMAIN**: Network Security

JA 6069 (DN 10057). Recover Me: CLOUD BASED DATA RECOVERY & RECONSTRUCTION SYSTEM USING BI METHODOLOGY ERASURE CODE IMPLEMENTATION

**<u>DOMAIN:</u>** Cloud Computing, Security









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JA 6070 (DN 10058). Black Money Check: INTEGRATION OF BIG DATA & CLOUD COMPUTING TO DETECT BLACK MONEY ROTATION WITH RANGE – AGGREGATE QUERIES

**DOMAIN:** Big Data, Data Mining, Cloud Computing, Society Based

JA 6071 (DN 10059). Hide Me & Authenticate: IMPLEMENTATION OF MULTI PARTY KEY AUTHENTICATION & STEGANOGRAPHY FOR SECURED DATA TRANSACTION IN CLOUD

**<u>DOMAIN:</u>** Cloud Computing, Security

JA 6072 (DN 10060). Card free Ticket Booking - IOT: CARDLESS TICKET BOOKING SYSTEM WITH SECURED FINGER PRINT BASED USER AUTHENTICATION

**DOMAIN**: Security, Embedded, Society / Social Cause, IOT

JA 6073 (DN 10061). Cloud SAAS: INTEGRATION OF IAAS & SAAS FOR EFFECTIVE CLOUD MANAGEMENT SYSTEM WITH RESOURCE SHARING AMONG CLOUD

**DOMAIN:** Cloud Computing (IAAS, SAAS)









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JA 6074 (DN 10062). Prevent Cloud DDOS: MULTI CHANNEL DDOS ATTACK DETECTION & PREVENTION FOR EFFECTIVE RESOURCE SHARING IN CLOUD COMPUTING

**DOMAIN:** Cloud Computing, Security

JA 6075 (DN 10063). Node Behavior check: DETECTION OF NODE
ACTIVITY AND SELFISH & MALICIOUS BEHAVIORAL
PATTERNS USING WATCHDOG - CHORD MONITORING

**DOMAIN:** Network Security

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