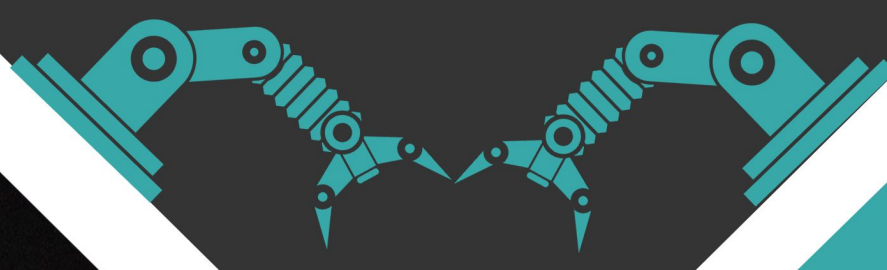


# TECH -TALK

THE BIENNIAL MAGAZINE OF COMPUTER  
SCIENCE AND ENGINEERING

```
os.gethostbyname('www.python.org')
sub_dir(settings).dump
seen(self, request, request)
self.request.fingerprints.add(fp)
if self.fingerprints:
    self.file:
    self.file.write(fp + os.linesep)
def request_fingerprint(self, request):
    return request_fingerprint(request)
```



2017-18 ISSUE - I

# Computer Science & Engineering Department

## VISION

*“The Computer Science & Engineering aims at providing continuously stimulating educational environment to its students for attaining their professional goals and meet the global challenges.”*

## MISSION

- To develop a strong theoretical and practical background across the computer science discipline with an emphasis on problem solving.
- To inculcate professional behavior with strong ethical values, leadership qualities, innovative thinking and analytical abilities into the student.
- Expose the students to cutting edge technologies which enhance their employability and knowledge.
- Facilitate the faculty to keep track of latest developments in their research areas. Encourage the faculty to foster the healthy interaction with the industry.

## UG – B.TECH

### PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO I: To inculcate the adaptability skills into the students for software design, software development or any other allied fields of computing.

PEO II: To equip the graduates with the ability to analyze, design and synthesize data to create novel products.

PEO III: Ability to understand and analyze engineering issues in a broader perspective with ethical responsibility towards sustainable development.

PEO IV: To empower the student with the qualities of effective communication, team work, continues learning attitude, leadership needed for a successful computer professional.

### PROGRAMME OUTCOMES (Pos)

#### Engineering Graduates will be able to:-

**Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### **PROGRAM SPECIFIC OUTCOMES(PSOs):-**

##### **1. Programming Paradigms:**

To inculcate algorithmic thinking, formulation techniques and visualization, leading to problem solving skills using different programming paradigms.

##### **2. Data Engineering:**

To inculcate an ability to Analyse, Design and implement data driven applications into the students.

##### **3. Software Engineering:**

Develop an ability to implement various processes / methodologies /practices employed in design, validation, testing and maintenance of software products.

#### **PG - (M.TECH)**

##### **PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)**

1. To inculcate the investigating and adaptability skills into the students to carry out research on recent trends in Computer Science and Engineering Technology .
2. To empower the student with the qualities of effective communication, technical document writing, team work, lifelong learning attitude, and leadership needed for a successful career.
3. Enlighten the students on analysing engineering issues in a broader perspective with ethical responsibility towards sustainable development to satisfy the societal needs.
4. Equip the students with all-round knowledge to adapt the evolving technical challenges and changing career opportunities in par with global competency.

##### **Program Outcomes PG Graduates will be able to :-**

PO1: Independently carry out research /investigation and development work to solve practical problems

PO2: Write and present a substantial technical report/document

PO3: Demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PO4: Design and develop software projects given their specifications and within performance and cost constraints.

PO5: An ability to Work on multi-disciplinary projects and exhibit team skills to upgrade knowledge for adoption of current technological changes.

PO6: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.





**Dr. D. Veeraiah**

Associate Professor

## "Super Pixel Based Virtual Texture Mapping of Image Synthesis"

### Abstract:

Image synthesis is the process of generating images of a 2D model or 3D model by means of computer programs. This involves several different subjects like global illumination, local illumination, rendering and visual perception. We concentrate on the subject of rendering which can be projection of environment into an image. Sometimes, it may be different to that what we really want to capture, i.e., rendering artifacts may occur. In existing method, object removal of an image takes place by the exemplar-based inpainting. While in proposed method, occlusion culling and shadow removal of an image to reduce the rendering artifacts.

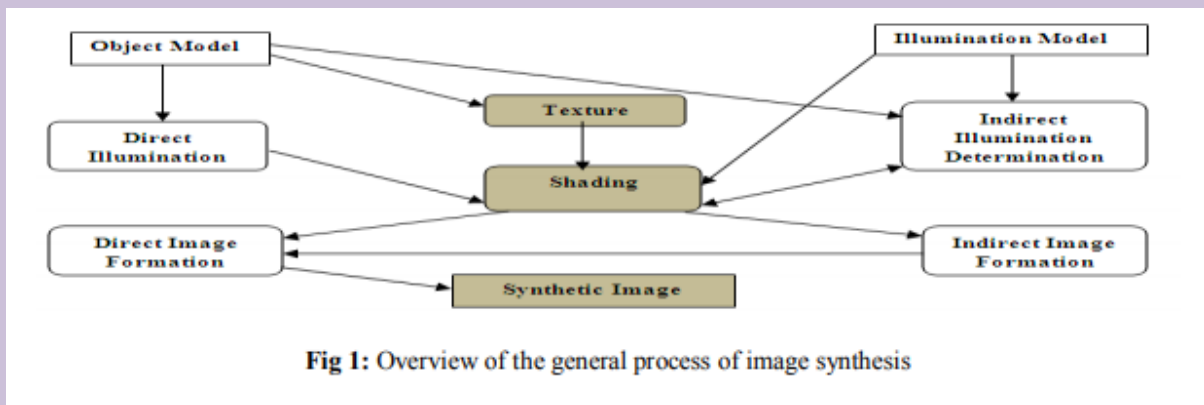


Fig 1: Overview of the general process of image synthesis

The applications of image synthesis are Computer - Aided Design (CAD), Entertainment, Simulation, Computer Art, Augmented Reality (Image analysis + Image Synthesis).

The DIBR (Depth Image Based rendering) method has limitations due to inherent artifacts in the warped image . As a result, perception of the depth and the desired experience are affected due to the reduced visual quality of virtual view. Ghosting artifacts are mixtures of colors at the edges in the original image which are projected into the neighbouring objects in the warped image. The cause of the ghosting artifact is the depth and texture misalignment and mixing of neighbouring colours at the depth discontinuities. Holes are undefined pixels in the rendered images. They appear due to uncovered (not captured) regions because they were occluded by foreground in the original view. They are classified into three types, namely cracks, disocclusions and out-of field areas

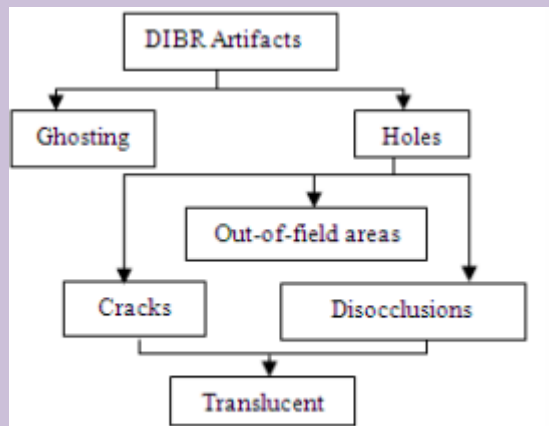


Fig 2: DIBR artifacts classification

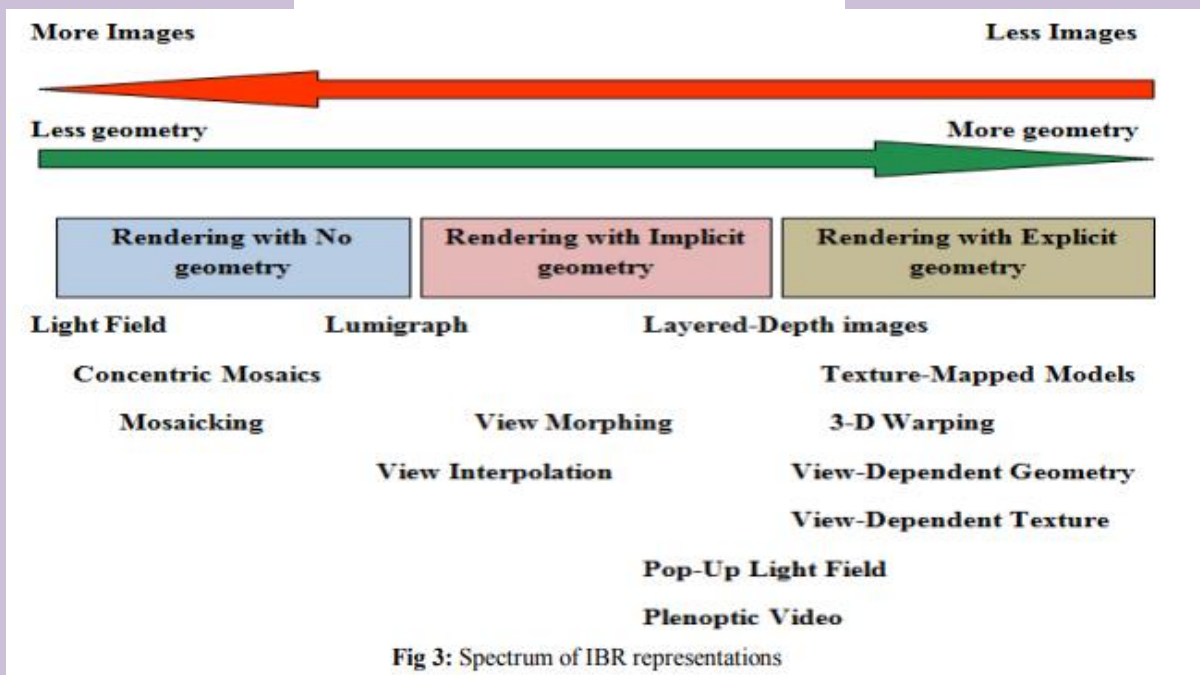


Fig 3: Spectrum of IBR representations

## Conclusion

We have presented a texture mapping based on uncertain values of neighbour pixels by in painting concentrated on rendering artifacts of occlusions and a number of state-of the-art solution in case of user-aided shadow removal method is performed using matlab. Our quantitatively-verified ground truth data set overcomes issues of mismatched illumination and registration in present data sets. Except the opportunities for improving shadow removal quality for the categorized shadows in our dataset, the detection and elimination for fantastically-complex shadows, such as overlapping shadows precipitated multiple mild resources with one of kind mild colors, and shadows as a result of transparent gadgets with complex internal shape and color, continues to be an open trouble for the community.



**Mr. K. Rangachary**  
Assistant Professor

## **"Extracting the Frequent Item Sets by Using Greedy Strategy in Hadoop"**

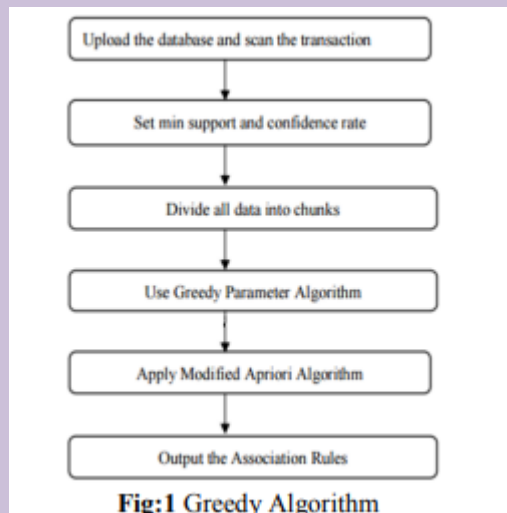
### **Abstract:**

Information mining came into the presence because of mechanical advances in numerous various controls. As it were, every one of the information on the planet are of no incentive without components to proficiently and successfully remove data and learning from them. In contrast with other information mining fields, visit design mining is a generally late improvement. This paper exhibits a novel approach through which the Apriori calculation can be progressed. The adjusted calculation presents elements time devoured in exchanges filtering for competitor itemsets and the quantities of tenets produced are additionally diminished.

### **Greedy Algorithm**

Orthogonal coordinating interest (OMP) calculation has gotten much consideration as of late. OMP calculation is an iterative voracious calculation that chooses at each progression the section. Orthogonal coordinating interest (OMP) develops an estimate by experiencing an emphasis procedure. At every cycle the locally ideal arrangement is figured. This is finished by finding the segment vector in A which most nearly looks like a leftover vector  $r$ . The lingering vector begins being equivalent to the vector that is required to be approximated i.e.  $r = b$  and is balanced at every cycle to consider the vector already picked. The expectation this grouping of locally ideal arrangements will prompt the worldwide ideal arrangement. As normal this is not the situation when all is said in done in spite of the fact that there are conditions under which the outcome will be the ideal arrangement. OMP depends on a variety of a prior calculation called Matching Pursuit (MP). MP essentially expels the chose section vector from the lingering vector at every emphasis.  $r_t = r_{t-1} - r_{t-1}$  Where a OP is the segment vector in A which most nearly takes after  $r_{t-1}$ . OMP utilizations a minimum squares venture at every emphasis to refresh the lingering vector with a specific end goal to enhance the guess. The OMP is a stepwise forward choice calculation and is anything but difficult to actualize.

The strategy actualized here for the mining of occasional weighted thing sets gives less execution time and contains less capacity and the quantity of hubs made are likewise less on the premise of support and certainty. Be that as it may, future improvements should be possible as to incorporate the proposed approach in a propelled basic leadership framework that backings area master's focused on activities in light of the qualities of the found IWIs. Moreover, the utilization of various total capacities other than least and most extreme will be examined.



## Conclusion

A voracious calculation is a numerical procedure that searches for straightforward, simple to-execute answers for complex, multi-step issues by choosing which subsequent stage will give the most evident advantage. Such calculations are called avaricious in light of the fact that while the ideal answer for each littler example will give a prompt yield, the calculation doesn't consider the bigger issue all in all. Once a choice has been made, it is never re-evaluated. Covetous calculations work by recursively building an arrangement of articles from the littlest conceivable constituent parts. Recursion is a way to deal with critical thinking in which the answer for a specific issue relies on upon answers for littler cases of a similar issue. The preferred standpoint to utilizing an avaricious calculation is that answers for littler occasions of the issue can be clear and straightforward.



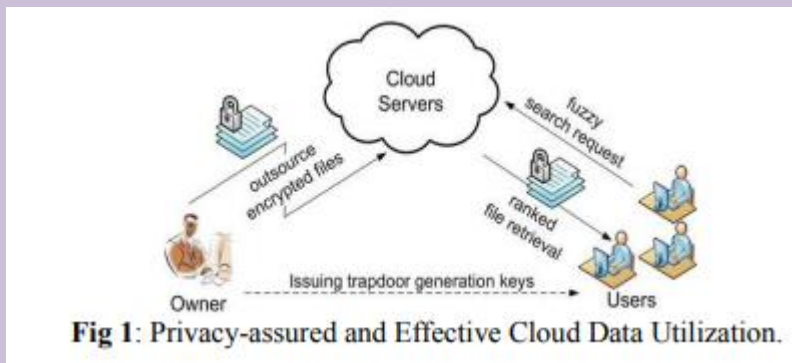
**Mr. B. Sivarama Krishna**

Sr. Asst. Professor

## **"Hierarchical Attribute Based Revocable Data Access Control For Multi Authority Cloud Storage"**

### **Abstract**

Distributed computing is rising colossally because of its points of interest and the adaptable stockpiling administrations given by it. Because of this the quantity of clients has come to at the top. Clearly the clients will be sharing the touchy information through the cloud. Also, the client can't trust the untrusted cloud server. Subsequently the information get to control has turned out to be exceptionally testing in distributed storage framework. In existing work revocable information get to control plan is proposed for multi-expert distributed storage frameworks.

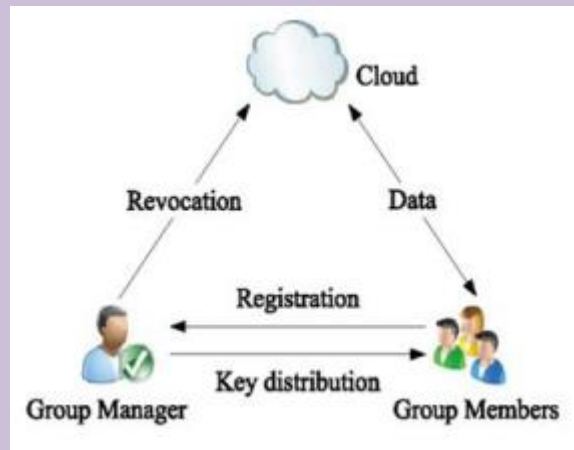


**Fig 1: Privacy-assured and Effective Cloud Data Utilization.**

This new worldview of information facilitating and information get to administrations acquaints an incredible test with information get to control. Since the cloud server can't be completely trusted by information proprietors, they can never again depend on servers to do get to control. Figure content Policy Attribute based Encryption (CP-ABE), is viewed as a standout amongst the most reasonable innovations for information get to control in distributed storage frameworks, since it gives the information proprietor more straightforward control on get to strategies. In CP-ABE conspire; there is an expert that is in charge of characteristic administration and key conveyance. The specialist can be the enlistment office in a college, the human asset division in an organization, and so on. The information proprietor characterizes the get to approaches and scrambles information as indicated by the arrangements. Every client will be issued a mystery key mirroring its characteristics. A client can unscramble the information just when its traits fulfill the get to strategies. Data decryption by Users



In our structure, there are different SDs, various proprietors, numerous AAs, and various clients. Moreover, two ABE frameworks are included. We term the clients having perused and compose access as information perusers and supporters, separately. The proprietors transfer ABE scrambled BR documents to the server. Every proprietor's BR document is encoded both under a specific fine grained and part based get to arrangement for clients from the PUD to get to, and under a chose set of information qualities that permits access from clients in the PSD. Just approved clients can decode the BR records, barring the server.



Expressive, Efficient, and Revocable Data Access Control for Multi-Authority Cloud Storage

## Conclusion

In this paper, we proposed a revocable multi-authority CPABE scheme that can support efficient attribute revocation. Then, we constructed an effective data access control scheme for multi authority cloud storage systems. We also proved that our scheme was provable secure in the random oracle model.



Ms. G. V. Rajya Lakshmi

Asst. Professor

## "Privacy-Preserving Data Mining with Random decision tree framework"

### Abstract:

Distributed data is ubiquitous in modern information driven applications. With multiple sources of data, the natural challenge is to determine how to collaborate effectively across proprietary organizational boundaries while maximizing the utility of collected information. Since using only local data gives suboptimal utility, techniques for privacy-preserving collaborative knowledge discovery must be developed. Existing cryptography-based work for privacy-preserving data mining is still too slow to be effective for large scale data sets to face today's big data challenge. Previous work on random decision trees (RDT) shows that it is possible to generate equivalent and accurate models with much smaller cost. We exploit the fact that RDTs can naturally fit into a parallel and fully distributed architecture, and develop protocols to implement privacy-preserving RDTs that enable general and efficient distributed privacy-preserving knowledge discovery.

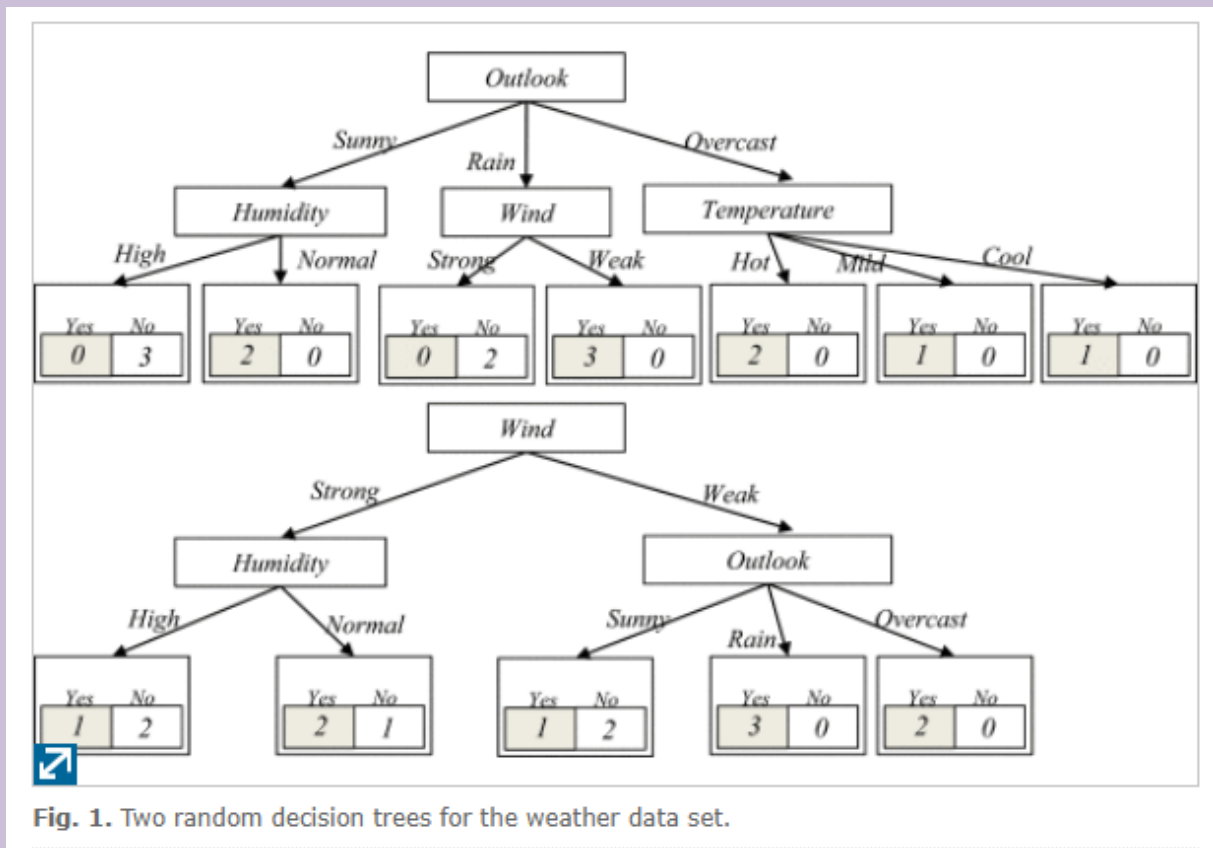


Fig. 1. Two random decision trees for the weather data set.

	—P1—		—P2—		
	outlook	temperature	humidity	windy	play
P1	sunny	hot	high	weak	no
	sunny	hot	high	strong	no
	overcast	hot	high	weak	yes
	rainy	mild	high	weak	yes
	rainy	cool	normal	weak	yes
	rainy	cool	normal	strong	no
	overcast	cool	normal	strong	yes
P2	sunny	mild	high	weak	no
	sunny	cool	normal	weak	yes
	rainy	mild	normal	weak	yes
	sunny	mild	normal	strong	yes
	overcast	mild	high	strong	yes
	overcast	hot	normal	weak	yes
	rainy	mild	high	strong	no

Distributed weather dataset

The distributed RDT algorithms and implementation presented in this paper are a significant step forward in creating usable, distributed, privacy-preserving, data mining algorithms. The running time of the algorithms, is comparatively much faster than the existing implementations, and is usable on everyday computing hardware. As compared to the standard, non privacy-preserving version, the accuracy of the privacy-preserving solution is exactly the same.

## Conclusion

We have demonstrated that general and efficient distributed privacy preserving knowledge discovery is truly feasible. We have considered the security and privacy implications when dealing with distributed data that is partitioned either horizontally or vertically across multiple sites, and the challenges of performing data mining tasks on such data. Since RDTs can be used to generate equivalent, accurate and sometimes better models with much smaller cost, we have proposed distributed privacy-preserving RDTs. Our approach leverages the fact that randomness in structure can provide strong privacy with less computation.



Mr. A. Raja Gopal

Sr. Asst. Professor

## "Real-time Big Data Analytics and parallel processing using Hadoop on Remote Sensing data"

### Abstract:

At present applications like Internet, mobile devices, social media, geospatial devices, sensors will generate massive volume of data. Processing and extracting the useful information in an efficient manner leads a system toward major computational challenges, such as to analyze, aggregate, and store data. For these Big data analytical architecture is proposed. The architecture comprises three main units, such as remote sensing Big Data acquisition unit (RSDU), data processing unit (DPU), data analysis decision unit (DADU). RSDU acquires data from the sensors and sends this data to the Base Station. DPU provides an efficient processing of Data by providing filtration, load balancing, and parallel processing. DADU is responsible for compilation, storage of the results, and generation of decision based on the results received from DPU and find Frequency occurrences

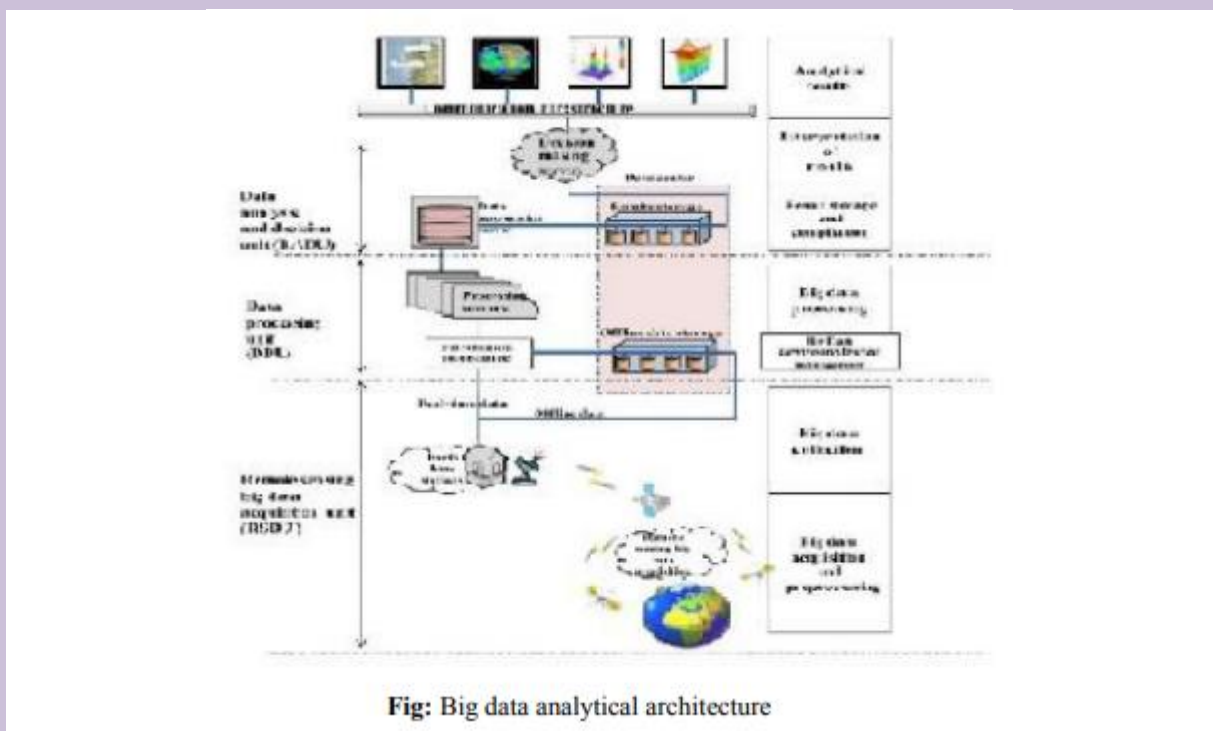


Fig: Big data analytical architecture



## **Remote Sensing Big Data Acquisition Unit (RSDU)**

Remote sensing promotes the expansion of earth observatory system as cost-effective parallel data acquisition system to satisfy specific computational requirements. The Earth and Space Science Society originally approved this solution as the standard for parallel processing in this particular context. As satellite instruments for Earth observation integrated more sophisticated qualifications for improved Big Data acquisition, soon it was recognized that traditional data processing technologies could not provide sufficient power for processing such kind of data. Therefore, the need for parallel processing of the massive volume of data was required, which could efficiently analyze the Big Data. This transmission is directly or via relay satellite with an appropriate tracking antenna and communication link in a wireless atmosphere.

## **Conclusion**

In we proposed architecture for real-time Big Data analysis for remote sensing application. The proposed architecture efficiently processed and analyzed real-time and offline remote sensing Big Data for decision-making. The proposed architecture is composed of three major units, such as RSDU, DPU, DADU. These units implement algorithms for each level of the architecture depending on the required analysis. The architecture of real-time Big is generic (application independent) that is used for any type of remote sensing Big Data analysis. Furthermore, the capabilities of filtering, dividing, and parallel processing of only useful information are performed by discarding all other extra data.



Mr. L. V. Krishna Rao

Assistant Professor

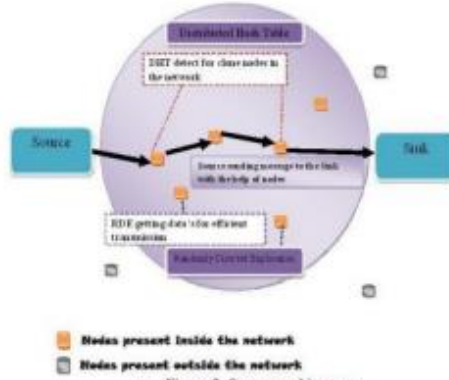
## **"On The Node Clone Detection Using Hashing In WSN"**

### **Abstract**

Wireless sensor networks accommodate a whole lot to thousands of sensor nodes and are wide employed in civilian and security applications. One in every of the intense physical attacks faced by the wireless sensor network is node clone attack. So node clone detection protocols area unit introduced via distributed hash table and arbitrarily directed exploration to detect node clones. The previous primarily based on a hash table value that is already distributed and provides key based facilities like checking and caching to observe node clones. The later one is exploitation probabilistic directed forwarding technique and border determination. The simulation results for storage consumption, communication value and detection chance is completed exploitation NS2 and obtained arbitrarily directed exploration is that the best one having low communication value and storage consumption and has smart detection chance.

### **DISTRIBUTED HASH TABLE (DHT):**

DHT through which a not fully centralized, key-based caching and checking process is constructed to capture cloned nodes. The protocol's appearance on memory consumption and a critical security metric are theoretically deducted through a probability model, and the resulting equations, with certain adjustment for real application, are guide by the simulations. Here a node's Chord point's coordinate is the hash value of the node's MAC address one segment that ends at the node's Chord point is related to every node, and all records whose keys fall into that segment will be transmitted to and stored in that node Every node maintains a finger table of size  $t = O(\log n)$  to further a binary-tree search. The finger table for a node with responsible for holding the  $t$  keys between 10 and 20.



• Figure 2. System architecture.

**TABLE I:** Distributed Detection Protoc --Ols Comparison, Where N Is Network Size, D Node Degree

Protocols	Nodes requirements	Communication cost	Memory cost	Detection Cost
Node to network broadcasting	Neighbors information	$O(n)$	$O(d)$	Strong
Randomized multicast	All nodes data	$O(n)$	$O(d \cdot n)$	Acceptable
Line selected	All nodes data	$O(\sqrt{n})$	$O(d \cdot \sqrt{n})$	Acceptable
RED	Knowledge of network geography	$O(\sqrt{n})$	$O(d \cdot \sqrt{n})$	Strong
DHT	DHT nodes information	$O(\log n \cdot \sqrt{n})$	$O(d)$	Strong
RDE	Neighbors information	$O(\sqrt{n})$	$O(d)$	Good

## Conclusion

Thus after identifying the weaknesses of proposed methods which has been done previously we proposed an efficient algorithm that covers various issues related to it. Using proposed algorithm it is possible to minimize the overhead of data packets. We have proposed distributed energy-efficient clone detection protocol with random witness selection. Specifically, we have proposed ERCD protocol, which includes the witness selection and legitimacy verification stages. Both of our theoretical analysis and simulation results have demonstrated that our protocol can detect the Clone attack with almost probability 1, since the witnesses of each sensor node is distributed in a ring structure which makes it easy be achieved by verification message. In addition, our can achieve better network lifetime and total energy protocol consumption with reasonable storage capacity of data buffer.



**Ms. K. Naga Prasanthi**

Sr.Asst.Professor

## **"An Efficient General Decentralized Clustering Exploiting Hierarchy"**

### **Abstract:**

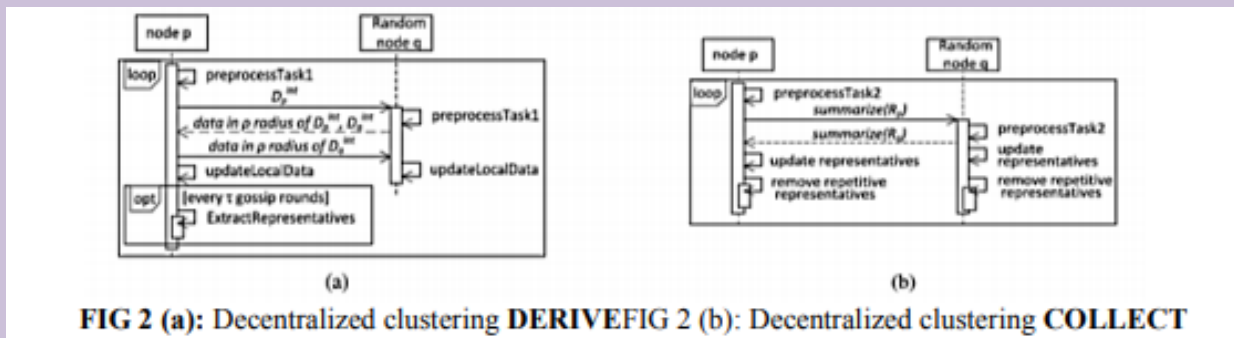
Clustering or unsupervised learning is important for analyzing large data sets. Large amounts of data are distributed among multiple sources. Examination of this data and identifying clusters is challenging due to processing storage and transmission costs. In this project we are implementing GD cluster, General Decentralized Clustering (GD) method which is capable of clustering dynamic and disturbed data sets. Nodes store and share a set of data items from other nodes. Data items represent internal data which may change over time and external data which may also store attribute vectors of data items from other nodes. Each data item is presented using an attribute vector. The union of internal and external data items is referred to as data item. Each node performs two tasks "DRIVE" and "COLLECT" which executes repeatedly and continuously in parallel. Nodes continuously cooperate through decentralized gossip-based communication to maintain summarized views of dataset. We modify GD cluster for execution of the Hierarchical Grid clustering methods on the summarized views and also offer enhancements to the basic algorithm. In this project experimental evaluation shows that GD cluster compared with the popular method LSP2P, clusters efficiently with scalable transmission cost.

### **Derive :**

To derive representatives for part of the data set located near internal data, node  $p$  should have an accurate and up-to-date view of the data located around each data belongs to internal data. In each round of DERIVE task, each node  $p$  selects another node  $q$  for three-way information exchange. It should first send internal data to node  $q$ . If size of internal data is large, it can summarize the internal data by an arbitrary method such as grouping the data using clustering.

To achieve the COLLECT task, each node  $p$  selects a random node every  $T$  time units, to exchange their set of representatives with each other. Both nodes store the full set of representatives. The summarize function used in the algorithm, simply returns all the representatives. The summarize function used in the algorithm, simply returns all the representatives given to it as input. A special implementation of this function is described. Which reduces the number of representatives at each node is initialized with all of its data items. The two algorithms of tasks DERIVE and COLLECT, start with a preprocessing operations and have no special function, thus we defer of the communication performed in DERIVE and COLLECT.





Distributed data mining is a dynamically growing area. A discussion and comparison of several distributed centroid based partitional clustering algorithms is provided in reference propose parallel K-means clustering, by first distributing data to multiple processors. In each synchronized algorithm round, every processor broadcasts its currently obtained centroids, and updates the centroids based on the information received from all other processors. Different from many existing distributed clustering algorithms, our algorithm does not require a central site to coordinate execution rounds, and/or merge local models.

## Conclusion

In this paper we first identified the necessity of an effective and efficient distributed clustering algorithm. Dynamic nature of data demands a continuously running algorithm which can update the clustering model efficiently, and at a reasonable place. We introduced GDCluster, a general fully decentralized clustering algorithm, and instantiated it for hierarchical grid clustering methods. The proposed algorithm enabled nodes to gradually build a summarized view on the global data set, and execute weighted clustering algorithm to build the clustering models. Adaptability to dynamics of the data set was made possible by introducing an age factor which assisted in detecting data set changes updating the clustering model. Our experimental evolution proves that hierarchical grid clustering can better satisfy the specific requirement so distributed systems. Embedded flexibility regarding the level of granularity. And the algorithm is well suited for problems involving point linkages.



**Mr. D. Srinivasa Rao**

Sr. Asst. Professor

## "Discovering Periodic high-utility item sets from transactional databases"

### Abstract:

High-utility item set mining is the task of finding high-utility item sets, i.e. sets of things that return a high benefit in a client exchange database. High-utility item sets are helpful, as they give data about profitable set of items purchased by clients to retail store administrators, which can then utilize this data to take strategic marketing decisions. An inherent limitation of customary high-utility item set mining calculations is that they are inappropriate to find repeating client buy conduct, although such conduct is normal all things considered, circumstances (for instance, a client may get a few items consistently, week or month). In this paper, we address this limitation by proposing the task of high-utility item set mining. The objective is to find discover of things that are periodically purchased by clients, create a high benefit. A productive calculation named PHM (Periodic High-utility item set Miner) is proposed to effectively identify all periodic high-utility item sets. Exploratory outcomes demonstrate that the PHM calculation is effective, and can filter a huge amount of non occasional examples to uncover just the desired high-utility item sets.

### PHM algorithm

To address the previously mentioned constraint of HUI and PFP mining calculations, this segment presents the idea of occasional high-utility item sets (PHUIs). The in the first place subsection show novel measures to survey the periodicity of HUIs, while the second subsection presents and effective calculation named PHM (Periodic High-Utility Item set Miner) to find PHUIs productively.

Itemset	u(X)	g(X)	minper(X)	maxper(X)	avgper(X)
{b}	22	3	1	3	1.75
{a, b}	23	3	1	3	1.75
{a, c}	34	4	1	2	1.75
{b, c}	28	3	1	3	1.75
{a}	25	4	1	2	1.4
{a, c}	34	4	1	2	1.4
{c, e}	27	4	1	3	1.4

The Search strategy (Algorithm 2) takes as input, an item set P, augmentations of P having the shape P z implying that P z was already acquired by affixing thing z to P,  $\gamma$ ,

minutil, minAvg, minPer, maxPer, the EUCS, and |D|. The search method plays out a circle on every expansion  $P \times P$  of  $P$ .

---

**Algorithm 3:** The Construct procedure

---

**Input:**  $P$ : an itemset,  $P \times$ : the extension of  $P$  with an item  $x$ ,  $P \times y$ : the Extension of  $P$  with an item  $y$   
**Output:** the utility-list of  $P \times y$

```

1 UtilityListOfPxy  $\leftarrow$   $\emptyset$ ;
2 foreach tuple  $ex \in P \times$ .utilitylist do
3   if  $\exists ey \in P \times y$ .utilitylist and  $ex.tid = ey.tid$  then
4     if  $P$ .utilitylist  $\neq \emptyset$  then
5       Search element  $e \in P$ .utilitylist such that  $e.tid = ex.tid$ ;
6        $exy \leftarrow (ex.tid, ex.iutil + ey.iutil - e.iutil, ey.rutil)$ ;
7     end
8     else
9        $exy \leftarrow (ex.tid, ex.iutil + ey.iutil, ey.rutil)$ ;
10    end
11    periodexy  $\leftarrow$  calculate period ( $exy.tid$ , UtilityListOfPxy);
12    Update MinPer MaxPer (UtilityListOfPxy, periodexy);
13    UtilityListOfPxy  $\leftarrow$  UtilityListOfPxy  $\cup$  { $exy$ };
14  end
15 end
16 return UtilityListPxy;
```

## Conclusion

This paper investigated the issue of mining periodic high-utility item sets (PHUIs). A proficient calculation named PHM (Periodic High-utility item set Miner) was proposed to proficiently find PHUIs utilizing novel least and normal periodicity measures. A broad test think about with real datasets has demonstrated that PHM can be more than two requests of size quicker than FHM, also, find more than two requests of greatness less examples by sifting non periodic HUIs.

## INTERNSHIPS IN ACADEMIC YEAR : 2016-17

Name of the Organisation and Place	Duration From -- to --	No. of Days	No .of
Koti Information Technologies pvt.ltd.	01-06-2017 to 24-06-	25	25
Bharat Sanchar Nigam Limited (BSNL),	29-05-2017 to 24-06-	28	13
WebTek Labs Pvt.Ltd. Hyderabad	02-06-2017 to 02-07-	30	9
Krest Technologies, Hyderabad	01-06-2017 to 30-06-	30	7
Avyaya Technologies, Hyderabad	01-06-2017 to 30-06-	30	6
Business-to-Consumer (B2C) Advertertisers,	04-06-2017 to 24-06-	20	4
Codefrux Technologies, Bangalore	15-06-2017 to 15-07-	30	9
CDTS IT Solutions , Vijayawada	01-06-2017 to 30-06-	30	3
Electronics Corporation of India (ECIT),	01-06-2017 to 30-06-	30	3
Electric Loco Shed, Vijayawada	27-05-2017 to 24-06-	28	5
Indian Institute of Technology(IIT), Madras	16-10-2016 to 17-03-	120	4
iSeef Technologies, Hyderabad	02-06-2017 to 02-07-	30	7
MindTech, Hyderabad	01-06-2017 to 30-06-	30	3
Rishi IT Solutions, Hyderabad	28-05-2017 to 27-06-	30	4
Sell Globally, Hyderabad	01-06-2017 to 21-06-	20	2
Shamgar Soft Sol., Vizag	27-05-2017 to 27-06-	30	4
Smart Bridge Pvt.Ltd., Hyderabad	01-06-2017 to 30-06-	30	2
snigdha Techno Soft, Hyderabad	11-05-2017 to 24-06-	45	3
South Central Railway, Vijayawada	27-05-2017 to 24-06-	29	3
Tata Steel, Jamshedpur	13-06-2017 to 04-07-	20	2
Textus Info Solutions Pvt.LTD, Hyderabad	29-05-2017 to 27-06-	30	4
Uniq Technologies, Chennai	01-06-2017 to 30-06-	30	2
Ureach Solutions, Bangalore	27-05-2017 to 10-07-	45	3
Jaitra Software Solutions Pvt.Ltd,	05-06-2017 to 21-07-	45	1
IBM Software Group, Hyderabad	02-06-2017 to 24-06-	22	1
Satya Technologies, Hyderabad	08-06-2017 to 10-07-	30	1
Tata Consultancy Services Limited (TCS),	05-06-2017 to 30-06-	25	1
AspireSoftware Consultancy, Bangalore	05-06-2017 to 30-06-	25	1
Internshala Virtual Training Center,	01-06-2017 to 12-07-	42	1
Electronic Corporation of India, LTD,	01-06-2017 to 29-06-	30	1
Laqshya IT Solutions, Vijayawada	01-06-2017 to 31-08-	30	1
NIT, Warangal	05-06-2017 to 14-07-	40	1
Microlink, Vijayawada	01-06-2017 to 30-06-	30	1
Tera Soft, Hyderabad	01-05-2017 to 01-06-	30	1
		<b>TOTAL</b>	<b>138</b>



## Placement Summary

S. NO	ACADEMIC YEAR	NO OF STUDENTS PLACED	MAX PACKAGE (In Lakhs)
1	2017-18	94	5.03

## Higher Education Details

SNO	ACADEMIC YEAR	NO OF STUDENTS
1	2017-18	11

## Placements(2017-18)

S.NO	Name of the Company	No of students selected	ANNUAL SALARY (LACS)
1	TCS	06	3.36
2	O.C.TANNER	01	5.03
3	TECHNOVERT	01	4.25
4	EFFTRONICS	01	4.0
5	INFOSYS	06	3.5
6	MINDTREE	01	3.0
7	HCL	03	1.4
8	ZOHO	01	3.6
9	PEOL	06	1.4
10	MIRACLE	08	1.4
11	CMS IT SERVICES	13	1.8
12	SUTHERLAND GLOBAL SERVICES	03	2.4
13	JUST DAIL	03	2.28
14	VEE TECHNOLOGIES	21	2.0
15	ALLSEC TECHNOLOGIES Ltd.	16	1.2
16	ZENQ	03	1.4

## **NCC B Enrollments**

<b>S.NO</b>	<b>RGTL NO</b>	<b>STUDENT NAME</b>	<b>BRANCH</b>
1	AP 17 SWA 375501	THOTAKURA LAVANYA	CSE 1ST YEAR
2	AP 17 SWA 375502	SEELAM NANDINI	CSE 1ST YEAR
3	AP 17 SWA 375503	SANAGALA GOUTHAMI	CSE 1ST YEAR
4	AP 17 SWA 3755101	MANDA SANTHI PRIYA	CSE 1ST YEAR
5	AP 17 SWA 3755105	SANKA BHAVANA	CSE 1ST YEAR
6	AP 17 SWA 3755108	RAYAPUDI SHIVANI	CSE 1ST YEAR
7	AP 17 SWA 3755109	KALAKONDA KRISHNA PRIYA	CSE 1ST YEAR
8	AP 17 SWA 3755110	TANNERU VINEELA	CSE 1ST YEAR
9	AP 17 SWA 3755111	DENDUKURI TEJASWINI	CSE 1ST YEAR
10	AP 17 SWA 3755112	TALLADA LAKSHMI SINDHURA	CSE 1ST YEAR
11	AP 17 SWA 3755119	KADIYALA SAHITHI	CSE 1ST YEAR
12	AP 17 SWA 3750122	SAGURIHI RISHITHA	CSE 1ST YEAR
13	AP 17 SWA 3755123	KARRE KUSUMANAJALI	CSE 1ST YEAR
14	AP 17 SWA 3755126	MUTTAMSETTY POORNA HARIPRIYA	CSE 1ST YEAR
15	AP 17 SWA 3755128	MOHAMMAD FAREEDA	CSE 1ST YEAR
16	AP 17 SWA 3755129	TUMMALAPALLI V.N.S.R SRIMONIKA	CSE 1ST YEAR
17	AP 17 SWA 375504	PIDAGU KRUPA SREE	CSE 1ST YEAR
18	AP 17 SWA 375505	NALLUMOTHU YASASWI	CSE 1ST YEAR
19	AP 17 SWA 375506	CHITTA TEJASWI	CSE 1ST YEAR
20	AP 17 SWA 375507	REGULLA SRAVANI	CSE 1ST YEAR
21	AP 17 SWA 375508	GORLA SWATHI	CSE 2ND YEAR
22	AP 17 SWA 375509	LETHAVADLA TEJASWINI	CSE 2ND YEAR
23	AP 17 SWA 375510	BILLA VENKAT ANUSHA	CSE 2ND YEAR
24	AP 17 SWA 375511	KALASANAI NANDNI	CSE 2ND YEAR
25	AP 17 SWA 375512	VEMULA REVATHI	CSE 2ND YEAR
26	AP 17 SWA 375513	DENDUKURI NAGA PRATHUYUSHA	CSE 2ND YEAR

## **C Enrollments**

<b>Sr.No</b>	<b>RGTL NO</b>	<b>NAME OF THE CADET</b>
<b>1</b>	APSW/2015/372552	GAVIRINENI BABY SINDHUJA
<b>2</b>	APSW/2015/372553	KONDURU RUPA MOUNIKA
<b>3</b>	APSW/2015/372554	MEDURI PRABHATHA
<b>4</b>	APSW/2015/372557	CHILLA BHUVANESHWARI
<b>5</b>	APSW/2015/372558	PARVATANENI GEETHIKA
<b>6</b>	APSW/2015/372559	KAREDLA POOJITHA
<b>7</b>	APSW/2015/372562	CHALLA JERUSA ESTHER RANI
<b>8</b>	APSW/2015/372563	KIRANMAI MEDISETTI

## Events



116 Cadets participated in "International Yoga Day" on 21-06-2017.



13 Cadets participated in "Tree Plantation Program" on 31-07-2017.



43 Cadets participated in "Independence Day Celebrations" on 15-08-17

### **SAHELI Club Events**

- ✓ An awareness programme on "Self Defence for Girl Students" on 14th December 2017.
- ✓ One-Day awareness program on "Legal rights of women" under Saheli for all girl students and Women staff on 07-10-2017.
- ✓ One-day Seminar on "Health and Legal Issues" for all girl students and staff on 19-09-2017.
- ✓ Interactive session with Smt Sadineni Yamini conducted 06-07-2017.





# Editorial Board



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CSE Department*



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CSE IV*





# Acknowledgements

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**-The Editorial Team  
TECH-TALK**

**LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING**

**(AUTONOMOUS)**

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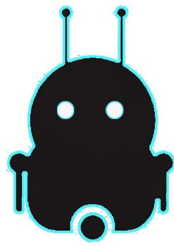
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# TECH-TALK

Biannual Magazine



“

**Education is the best friend.  
An educated person is  
respected everywhere  
education beats the beauty  
and the youth ”**



**COMPUTER SCIENCE  
ENGINEERING**