

# & TECHNOLOGY

approved by AICTE, New Delhí, Accredited with NAAC'B' Grade

## **COMPUTER SCIENCE & ENGINEERING**



## CSE

LEAFLET

volume 5 (18-19)

## íssue -6(Apríl-May)

### Department Vision:

To empower students of Computer Science and Engineering Department to be technologically adept, innovative, global

citizens possessing human values

#### **Department Mission:**

To Encourage students to become self-motivated and problem solving individuals To prepare students for professional career with academic excellence and leadership skills. To Empower the rural youth with computer education. To Create Centre's of excellence in Computer Science and Engineering.

## Student Corner

It is proudly say that our Final year students of CSE gave very good pass percentage 93.39% of their final end semester exams. HOD of CSE Dr. S. Suresh and other faculty members are appreciated for their performance

#### **IV/IV B. Tech Toppers**



B.K.S. Brahmini 85.5%



V.Usha 84.5%



N.Rohitha 82.34%



Ch.Geetha Madhuri 82.17%

## Students Achievements':



Our Final year student **Mr. GOPISETTI SAI VENKATA AKHIL**, Roll.No:**158T1A0588** Obtained **6<sup>th</sup> rank in AP-PGECT.** HOD & Faculty congratulated for his significant achievement.

Mr. GOPISETTI SAI VENKATA AKHIL also placed in Wipro.

### STUDENT PUBLICATIONS

S.No	Author Name	Paper Title	
1.	Mr. M. Ravikanth	Analyzing human behavior for financial fraud	
	Sanagavarapu Lavanya	detection	
	Vemulapalli Sai Likhitha		
	Bolem Bhavya Sri		
	Koneru Mukesh		
2.	Mrs. B. Swathi		
	Uppalapati Lalitha		
	Abdul Fazulunnisa	using block chain technique	
	Koneru Divya Sree		
	Chalasani Jayanth		
	Mrs. M. Ragini ,		
	Bandreddi Hima Bindu		
3.	Yalamanchili Lakshmi Sai	Hand written digit recognizer	
	K Meher Mandeep Mahesh Sai		
	Bellapukonda Gayatri Sruthi		
	P.Sunitha,		
	Bandla Kanaka Sri Brahmini	Revocable stockpile identity based encryption	
4.	Tulimilli Durga Bhavani	in cloudcomputing for unaissilable data	
	Parasa Mounika	sharing	
	Ananthaneni Haswanth		
5	Mrs. M. Ragini	Smart Campus	
5.	Tadapaneni Hareesh Kumar		

	I Goni Venkata Krishna		
	Kandlagunta Bhargayi		
	Kandiagunta Dhargavi Kanaharla Harsha Vardhar		
	Kancharla Harsha Vardhan		
	Mr. K. Sandeep,		
	Koyyani Durga Prasad		
6.	Velagapudi Mohana Harika	Self driving car using CNN	
	Kamineni Eswar Sesha Sai		
	Kilaru Bhargav Gangadhar		
	Mr. K. Sandeep,		
	L.Govardhana rao	Automated tool to convert handwritten text image into text	
7.	Muppa Kushma		
	Kollati Himani		
	Yelineedi Dorayya Chowdary		
	Mr. Y. Ashok,		
	Chimata Madhuri		
8.	Gandrapu Asha	Cloud log security for cloud forensics	
	Bandaru Chaitanya Rekha		
	Chekuru Aakash		
	Ms. P. Sunitha		
	Gopisetti Sai Venkata Akhil		
9.	Muppalla Navya Tejaswi	Acquisition of secured data from cloud	
	Devabathini Sai Iithin		
10	MIS. CH. Padmini		
	Veeramachaneni Usha	Smart License Plate	
10.	V Teja Bala Krishna		
	Shaik Samarin Banu		
	Devireddy Chandrika		
	Mr. P.V. Hari Prasad		
	Mandava Sampath	Privacy Protection based access control	
11.	T Pavitra Sanjana	scheme in cloud based services	
	M Yeswitha Chowdary		
	Allam Yashwanth Kumar		
	Mr. V. V. R Manoj,		
	Nekkalapu Rohitha	Efficient knyword awara representative travel	
12.	Battula Ramyasri	route recommendation	
	Kodali Nithya Chowdary	Toute recommendation	
	Bodepudi Rohit		
	Mr. P. Jagadeeswara Rao,		
	Jampa Prakruti		
13.	Ganapaneni Vamsi Krishna	Product Quantization based approach for	
	Kasaraneni Sai Prathyusha	approximate nearest neighbor	
	Shiny Manda		
	Mrs. P. Swathi	Pragmatic revival of documents in cloud	
	Ala Sri Harsha	computing utilizing	
14	Jampala Sri Sai Ivothsna	attribute based	
1	Nadella Vinav		
	Surananeni Sai Dutt		
	Mrs G Venkata Ramana	Smart Crop spraving System	
15.	Gollanudi Sai Pranitha	Smart Crop spraying System	
	Sondeti Renuke		
	Molloropy Dromed Kymer		
	Waharapu Franod Kumar		
	valivartni Sri Hari Varma		
16.	Mrs. M. Hima Jyothi ,	lo1 based smart parking system	
	Darapureddy Sasi Pavan		

	Vemula Prathyusha	
	Chebrolu Sowmya	
	Koneru Sai Varsha	
	Mrs. K. Sandhya Rani,	IoT based accident alert and real time
	K Sri Durga Sai Priya	vehicle tracking using GSM & GPS and
17.	Puppala Sri Ranga	E-Bus Pass
	Gundlathoti Suryavathi	
	Chennakesavula Deepthi	
	Mr. M. Ravikanth,	Kid's tracker using
	Paruchuri Sai Samyuktha	wearable for child
18.	Bolla Nithin	safety
	Varre Sai Manoj	
	Udayagiri Rajani	
	Mrs.B.Swathi,	Smart garbage
	Bandi Vishnu Priya	monitoring system
19.	Kanugamakula Sandhya	using internet of
	B Sai Krishnakanth	things
	Movva Sasi Kala	
	Mrs. L. N. B. Jyotsna,	An Efficient
20.	Naru Swarnnaja	classification of
	Pasupuleti Sowjanya	plant disease
	P Sai Nikhil	detection using image processing
	Mandavalli Priyanka	

## STUDENT ARTICLES

# Indoor location identification technologies for real-time IoT-based applications: An inclusive survey

The advent of the Internet of Things has witnessed tremendous success in the application of wireless sensor networks and ubiquitous computing for diverse smart-based applications. The developed systems operate under different technologies using different methods to achieve their targeted goals. In this treatise, we carried out an inclusive survey on key indoor technologies and techniques, with to view to explore their various benefits, limitations, and areas for improvement. The mathematical formulation for simple localization problems is also presented. In addition, an empirical evaluation of the performance of these indoor technologies is carried out using a common generic metric of scalability, accuracy, complexity, robustness, energy-efficiency, cost and reliability. An empirical evaluation of performance of different RF-based technologies establishes the viability of Wi-Fi, RFID, UWB, Wi-Fi, Bluetooth, Zig Bee, and Light over other indoor technologies for reliable IoT-based applications. Furthermore, the survey advocates hybridization of technologies as an effective approach to achieve reliable IoT-based indoor systems. The findings of the survey could be useful in the selection of appropriate indoor technologies for the development of reliable real-time indoor applications. The study could also be used as a reliable source for literature referencing on the subject of indoor location identification.



Mahammed Rehana, Iii/Iv B.Tech

168T1A0561

## A Survey on malware analysis and mitigation techniques

In recent days, malwares are advanced, sophisticatedly engineered to attack the target. Most of such advanced malwares are highly persistent and capable of escaping from the security systems. This paper explores such an advanced malware type called Advanced Persistent Threats (APTs). APTs pave the way for most of the Cyber espionages and sabotages. APTs are highly sophisticated, target specific and operate in a stealthy mode till the target is compromised. The intention of the APTs is to deploy target specific automated malwares in a host or network to initiate an on-demand attack based on continuous monitoring. Encrypted covert communication and advanced, sophisticated attack techniques make the identification of APTs more challenging. Conventional security systems like antivirus, anti-malware systems which depend on signatures and static analysis fail to identify these APTs. The Advanced Evasive Techniques (AET) used in APTs are capable of bypassing the stateful firewalls housed in the enterprise choke points at ease. Hence, this paper presents a detailed study on sophisticated attack and evasion techniques used by the contemporary malwares. Furthermore, existing malware analysistechniques, application hardening techniques and CPU assisted application security schemes are also discussed. Finally, the study concludes by presenting the System and Network Security Design (SNSD) using existing mitigation techniques. by



P. Lakshmi Chandana, III/IV B. Tech

168T1A0589

# A comprehensive taxonomy of schemes to detect and mitigate blackhole attack and its variants in MANETs

Mobile Ad hoc Network due to its intrinsic properties of mobility, infrastructure-less working and vulnerability of underlined standard routing protocols is exposed to various packet drop attacks such as blackhole attack, grayhole attack and co-operative blackhole attack. These attacking nodes participate actively in the route establishment process and when a path is established between two end nodes through these nodes, these nodes drop the data packets according to a pattern related to the type of attack. So, security of the network communication is a very critical issue and must be handled with greater efficiency and effectiveness. A lot of research has been carried out to detect and mitigate the effects of blackhole attack and its variants in MANET. In this paper, Different variants of blackhole attack are discussed along with shortcomings of present literature. We present a comprehensive taxonomy of the mitigation and detection mechanism along with summarization and comparison of some published work related to those categories. There are in total sixteen different categories of mitigation mechanism and we have reviewed and summarized ninety one research works related to the presented categories on various parameters like overhead, base protocol, modification in base routing protocol, detection type, nature, features and limitations.



M. Eswar Krishna, III/IV B.Tech

168T1A0589

## A recent review of conventional vs. automated cyber security antiphishing techniques

In the era of electronic and mobile commerce, massive numbers of financial transactions are conducted online on daily basis, which created potential fraudulent opportunities. A common fraudulent activity that involves creating a replica of a trustful website to deceive users and illegally obtain their credentials is website phishing. Website phishing is a serious online fraud, costing banks, online users, governments, and other organizations severe financial damages. One conventional approach to combat phishing is to raise awareness and educate novice users on the different tactics utilized by phishes by conducting periodic training or workshops. However, this approach has been criticized of being not cost effective as phishing tactics are constantly changing besides it may require high operational cost. Another anti-phishing approach is to legislate or amend existing cyber security laws that persecute online fraudsters without minimizing its severity. A more promising anti-phishing approach is to prevent phishing attacks using intelligent machine learning (ML) technology. Using this technology, a classification system is integrated in the browser in which it will detect phishing activities and communicate these with the end user. This paper reviews and critically analyses legal, training, educational and intelligent anti-phishing approaches. More importantly, ways to combat phishing by intelligent and conventional are highlighted, besides revealing these approaches differences, similarities and positive and negative aspects from the user and performance prospective. Different stakeholders such as computer security experts, researchers in web security as well as business owners may likely benefit from this review on website phishing.



M. Venkateswarlu , III/IV B.Tech 168T1A0566

# Digital watermarking: Applicability for developing trust in medical imaging workflows state of the art review

Medical images can be intentionally or unintentionally manipulated both within the secure medical system environment and outside, as images are viewed, extracted and transmitted. Many organisations have invested heavily in Picture Archiving and Communication Systems (PACS), which are intended to facilitate data security. However, it is common for images, and records, to be extracted from these for a wide range of accepted practices, such as external second opinion, transmission to another care provider, patient data request, etc. Therefore, confirming trust within medical imaging workflows has become essential. Digital watermarking has been recognised as a promising approach for ensuring the authenticity and integrity of medical images. Authenticity refers to the ability to identify the information origin and prove that the data relates to the right patient. Integrity means the capacity to ensure that the information has not been altered without authorisation.

This paper presents a survey of medical images watermarking and offers an evident scene for concerned researchers by analysing the robustness and limitations of various existing approaches. This includes studying the security levels of medical images within PACS system, clarifying the requirements of medical images watermarking and defining the purposes of watermarking



N.Gayatri, III/IV B.Tech

168T1A0545

### DO YOU KNOW?

There are only two words in the English language that have all five vowels in order:

"abstemious"=moderate and "facetious"= treating serious issues with deliberately inappropriate humor.

- The name of all the continents end with the same letter that they start with. Example: Asia, Africa, Europe etc.,
- The "sixth sick sheik's sixth sheep's sick" is said to be the toughest tongue twister in the English language.
- Cockroaches were there 120 million years before dinosaurs roamed the earth.
- Russia has a larger surface area than Pluto

## **FUN CORNER**

- 1. What can clap without any hands?
- 2. What can go up and come down without moving?
- 3. When the water comes down, I go up. What am I?
- 4. What kind of dog that never bites?
- 5. What has a cap but has no head?
- 6. What has no weight but is heavy enough to sink a ship?
- 7. If a man carried my burden, he would break his back. I am not rich, but I leave silver in my track. Who am I?
- 8. I never ask questions, but always answered. What am I?
- 9. U can break me easily without even touching me or seeing me. What am I?
- 10. The more you take, the more you leave behind. What am I?

Fun Corner Answers 1. A Thunder, 2. Temperature, 3. An Umbrella, 4. A Hotdog, 5. A Bottle,

6.A Hole, 7.A Snail, 8.A Doorbell, 9.A Promise, 10.Footsteps.

## Staff Corner

### WORKSHOPS/SEMINARS/FDPS ATTENDED

S.No	Faculty	Name of the Event / Course
1	Mr.K.Sateesh	Eight Weeks NPTEL course (One week FDP) on Cloud Computing
2	Mr.M.Ravikanth	Five Day Faculty Improvement Program on Data Structures and Algorithms
		Workshop at Madanapalle Institute of Technology and Science from 28 <sup>th</sup> May
		2018 to 1 <sup>st</sup> June 2018
3	Mrs.K.Sandhya Rani	Three Day IUCEE International Engineering Educator workshop at VIT-AP from 12 <sup>th</sup> July 2018 to 14 <sup>th</sup> July 2018
4	Dr.A.Srinivasa Rao	One Day Seminar on Digitization Vs Digital Based Analysis at V R Siddhartha Engineering College on 31 <sup>st</sup> October 2018
5	Mr.K.Sandeep	One Day Seminar on Digitization Vs Digital Based Analysis at V R Siddhartha Engineering College on 31 <sup>st</sup> October 2018
6	Mr.M.Ravi kanth	One Day Seminar on Digitization Vs Digital Based Analysis at V R Siddhartha Engineering College on 31 <sup>st</sup> October 2018
7	Mr.M.Ravi kanth	An Online Course on Algorithmic Toolbox by University San Diego and National Research University Higher School of Economics, offered through Course
8	Mr.K.Sateesh	One Week Faculty Development Program on Data Sciences at V R Siddhartha Engineering College from 12 <sup>th</sup> November 2018 to 16 <sup>th</sup> November 2018
9	Mrs.N.Sri Lakshmi	One Week Faculty Development Program on Data Sciences at V R Siddhartha Engineering College from 12 <sup>th</sup> November 2018 to 16 <sup>th</sup> November 2018
10	Mrs.M.Hima Jyothi	One Week Faculty Development Program on Data Sciences at V R Siddhartha Engineering College from 12 <sup>th</sup> November 2018 to 16 <sup>th</sup> November 2018
11	Mr.R.Phani Kishore	One Week Faculty Development Program on Data Sciences at V R Siddhartha Engineering College from 12 <sup>th</sup> November 2018 to 16 <sup>th</sup> November 2018
12	Mr.K. Sandeep	3Months online MOOC'S Program on "Foundation Program in ICT for Education [FDP101X]" Organized by IIT Bombay
13	Mr .PJagadeeshwara Rao	3Months online MOOC'S Program on "Foundation Program in ICT for Education [FDP101X]" Organized by IIT Bombay
14	Mr.M. Ravi Kanth	3Months online MOOC'S Program on "Foundation Program in ICT for Education [FDP101X]" Organized by IIT Bombay
15	Mr.V.V.R.Manoj	3Months online MOOC'S Program on "Foundation Program in ICT for Education [FDP101X]" Organized by IIT Bombay
16	Mr.K. Sandeep	3Months online MOOC'S Program on "Pedagogy for online and Blended Teaching Learning Process [FDP201X]" Organized by IIT Bombay
17	Mr.P.Jagadeeshwara Rao	3Months online MOOC'S Program on "Pedagogy for online and Blended Teaching Learning Process [FDP201X]" Organized by IIT Bombay
18	Mr.M.Ravi Kanth	3Months online MOOC'S Program on "Pedagogy for online and Blended Teaching Learning Process [FDP201X]" Organized by IIT Bombay
19	Mr.V.V.R.Manoj	3Months online MOOC'S Program on "Pedagogy for online and Blended Teaching Learning Process [FDP201X]" Organized by IIT Bombay
20	Ms.K. Sandhya Rani	12 Months Certification Program on IIEECP organized by IUCEE
21	Mr.K.Sandeep	One Day Coordinators Workshop on Moodle learning on1 <sup>st</sup> March 2019 at IIT Bombay
22	Mr.M.Ravi Kanth	One Day Coordinators Workshop on Moodle learning on 1 <sup>st</sup> March 2019 at IIT Bombay
23	Mr.K.Sandeep	One Day Faculty Development Program on "Moodle Learning Management System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula Institute Of Engg &Tech, Ganguru, Vijayawada.
24	Mr.M. Ravi Kanth	One Day Faculty Development Program on "Moodle Learning Management System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula

		Institute Of Engg &Tech
25		One Day Faculty Development Program on "Moodle Learning Management
	Ms. P.Sunitha	System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula
		Institute Of Engg &Tech
26		One Day Faculty Development Program on "Moodle Learning Management
	Ms. B.Swathi	System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula
		Institute Of Engg &Tech
27		One Day Faculty Development Program on "Moodle Learning Management
	Ch.Padmini	System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula
		Institute Of Engg &Tech
28		One Day Faculty Development Program on "Moodle Learning Management
	Ms.V.Swathi	System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula
		Institute Of Engg &Tech
29		One Day Faculty Development Program on "Moodle Learning Management
	Ms.L.N.B.Jyostna	System" in association with IIT Bombay on 15 <sup>th</sup> March 2019 at Dhanekula
		Institute Of Engg & Tech
30	Mr.K.Sandeep	Twelve Weeks NPTEL course on Joy of Computing using Python(NOC19- CS09)
31	Mr M Davi Vonth	Twelve Weeks NPTEL course on Joy of Computing using Python(NOC19-
	IVIT.IVI.Kavi Kalitli	CS09)
32	32 No D Societa	Twelve Weeks NPTEL course on Cryptography and Network Security(NOC19-
	ivis. P.Suintha	CS28)
33	Ma D Swathi	Twelve Weeks NPTEL course on Cryptography and Network Security(NOC19-
	INIS. D.SWattill	CS28)
34	Ms.Y.Salini	Eight Weeks NPTEL course on Data Mining (NOC19-CS15)

## NPTEL FACULTY CERTIFIED

S.No	Name of the Staff Member	Subject
1	Mr.K.Sateesh	Cloud Computing
2	Mr.K.Sandeep	Joy of Computing using Python(NOC19 CS09)
3	Mr.M.Ravi Kanth	Joy of Computing using Python(NOC19 CS09)
4	Ms. P.Sunitha	Cryptography and Network Security(NOC19 CS28)
5	Ms. B.Swathi	Cryptography and Network Security(NOC19 CS28)
6	Ms.Y.Salini	Data Mining (NOC19-CS15)

## IUCEE FACULTY CERTIFIED

S.No	Name of the Staff Member
1.	Ms.K. Sandhya Rani

#### **Technical Review Committee**

Dr.S.Suresh HOD& Professor,

Dr.A.Srinivasa Rao, Professor

### Editorial & Design Team:

Faculty:Ms.P.Sunitha,Asst.Prof

Student coordinators s:

Mr.S.Varsha,Ms.Usha,IV/IV CSE