

COMPUTER NETWORKS AND SECURITY RESEARCH CENTER

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



Dr Gandharba Swain



Dr K.V.D. Kiran

OBJECTIVES OF THE CENTER

- Conducting research in emerging topics of Computer networking, Cyber Security, and Forensics.
- Providing hands-on training on areas like as cryptography, intrusion detection, secure communication protocols, and malware analysis, network monitoring, penetration testing, and digital forensics
- Fostering collaboration between academia, industry, and government agencies to translate research into real-world security solutions.

KEY TOPICS OF RESEARCH

- Cryptography
- Routing Algorithms
- Blockchain Technology
- Data Security through Steganography
- Image Security
- Wireless Sensor Networks
- Body Area Networks
- Applications in Education
- Applications in Healthcare



K L University

(Deemed to be University estd, u/s. 3 of the UGC Act, 1956)

(NAAC Accredited "A" Grade University)

KONERU LAKSHMAIAH EDUCATION FOUNDATION

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1. ABOUT THE CENTER

This research center has been in existence since year 2017. It is situated in Ground floor of Computer Science block of KLEF. There are more than 30 computers with various tools available in this lab. More than 25 faculty members are part of this research center. They share their ideas among one another and pursue their research goals. These faculty members are having interests on computer networking, routing, wireless sensor networks, security protocols, blockchain and its applications, data security, image security, forensics, and ethical hacking are collaborating and helping each other and pursuing research and publications.

For academic course delivery- the courses like Cryptography, blockchain and cryptocurrency, ethical hacking, digital forensics, malware analysis, computer networks and protocols etc. are handled by this team of faculty. They prepare the list of experiments and deliver to students during the lab hours as per the semester time table.

The senior faculty members of this center guide to their research scholars towards their PhD work. A good number of scholars are already awarded their PhD degrees by the faculty members of this center. Also a good number of scholars are pursuing their research. As per the requirement for their research, the scholars are advised to come to the center and interact with their supervisors and other expert team members in the center.

The various research directions taken up by the scholars are listed below.

- Cryptography- cloud security, big data security
- Routing Algorithms, authentication protocols
- Blockchain Technology – Applications in healthcare, and education
- Data Security through Steganography
- Image Security: digital image watermarking, image tamper detection
- Wireless Sensor Networks- QoS, congestion, cluster head, energy efficiency
- Body Area Networks

2. List of Faculty Members in this Center

Faculty Details	Faculty Photo	Faculty Details	Faculty Photo	Faculty Details	Faculty Photo
Dr. Gandharba Swain, Professor, Emp id:3895		Dr. G. Bindu, Associate Professor, Emp id: 6997		Dr. A. Gopi, Assistant professor, Emp id: 6620	
Dr. K.V.D Kiran, Professor, Emp id: 1379		Dr. K. Amarendra, Professor, Emp id: 5291		Dr. K.Sathish Kumar, Associate Professor, Emp id: 6624	
Dr. Ch. Radhika Rani, Associate Professor, Emp id: 1177		Dr. Bhabendu K. Mohanta, Associate Professor, Emp id: 6575		Dr. Asesh K. Tripathy, Associate Professor, Emp id: 6860	
Dr. P. V. V. Prasad, Associate Professor, Emp id: 1498		Dr. Basant Shah, Associate Professor, Emp id: 6869		Dr. Abhishek Guru, Associate Professor, Emp id: 7070	
Dr. K. Ruth Ramya, Associate professor, Emp id: 1901		Dr. T.Venkata Satya Vivek, Assistant Professor, Emp id: 7113		Dr. A. Raja Basha, Associate Professor, Emp id: 6992	
Mrs. K. Swetha, Assistant professor, Emp id: 3841		Dr. Nagarjuna Karyemsetty, Associate Professor, Emp id: 6641		Dr. M. Anusha, Associate Professor, Emp id: 5890	
Dr. G. Krishna Chaitanya, Associate Professor, Emp id: 4108		Mr. M. Chandan, Assistant Professor, Emp id: 4056		Ms. V. Lalitha, Assistant professor, Emp id: 6279	
Dr. Nilu Singh, Associate Professor, Emp id: 6415		Dr. G. Jagadish, Associate Professor, Emp id: 7398		Dr Sai N. Raghavendra, Associate Professor, Emp id: 5908	


3. Activities Conducted

Name of the event: **Y20 SDP-1 Hackathon**

Dates: 4th & 5th December 2021

Venue: **C Block (Hackathon),
R&D Auditorium, New Seminar Hall (Presentations)**

Living up to the purpose of its inception, SDP-1 Hackathon has engaged the entire batch of Y20 students of the department in dedicating their heart and soul to enhancing further their fantastic pieces of work that is a result of top-notch diligence. It united all the exceptional engineers in making by challenging their expertise at every level with mind-boggling incremental desires and requirements needing rapid tending to.

	
<p>Faculty reviewing student's project</p>	<p>Students presenting projects</p>
	
<p>Participants in the Hackathon event</p>	<p>HOD, CSE addressing the participants</p>

Name of the event: SDP Learnathon

Dates: 14th & 15th October 2023

Venue: C Block, M Block, R&D Block

Departments: CSE(HONORS), CSE(REGULAR), CS&IT, AI&DS

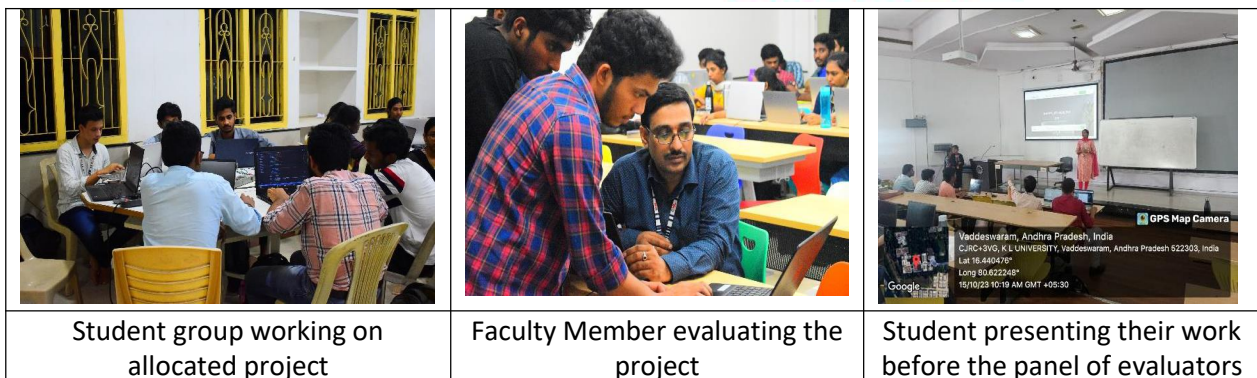
Courses : PFSD, MSWD, JFSD

Year: 2nd & 3rd Year

This Learnathon was conducted to bridge the gap between classroom learning and projects. The students learnt to concentrate on incomplete functionalities and prioritizing this event for career benefits. It was indeed a quality-driven competition, showcasing students' technical acumen. It also provided a platform for creativity and self-improvement culminating in a vibrant showcase of students' dedication.

The statistics for the student participation is as follows for the said learnathon.

Batch	Course	Type	#Teams	#Students
Y21	21TS3108A-JFSD	Advanced	565	1642
Y21	21TS3108R-JFSD	Regular	330	969
Y21	21TS3113-JFSD	Regular	63	185
			958	2796
Y22	22SDCI01A-PFSD	Advanced	400	1179
Y22	22SDCI01R-PFSD	Regular	308	909
			708	2088
Y22	22SDCS01A-MSWD	Advanced	357	1041
Y22	22SDCS01R-MSWD	Regular	224	672
			581	1713
			2247	6597

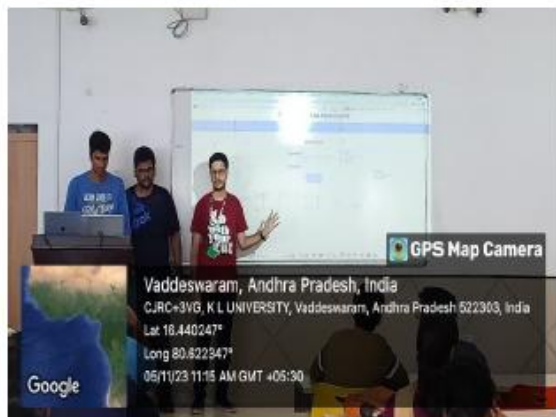


Student group working on allocated project

Faculty Member evaluating the project

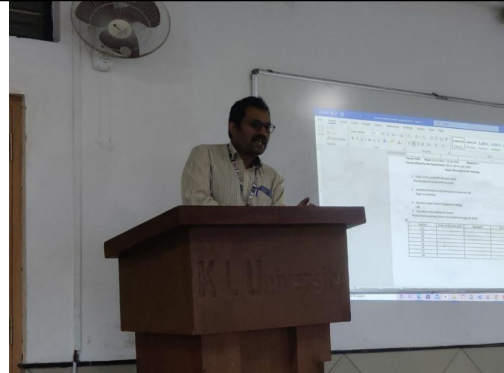
Student presenting their work before the panel of evaluators

Name of the event : SDP Hackathon
 Dates: 4th & 5th November 2023
 Venue: Ground Floor Lab-CSE Block
 Departments: CSE(HONORS), CS&IT, AI&DS



A hackathon in the context of a subject like "Java Full Stack Development (JFSD)" serves as an intensive, collaborative event where participants rapidly develop and prototype innovative software solutions using their Java full-stack skills. It fosters creativity, problem-solving, and teamwork, providing hands-on experience with real-world challenges. Hackathons also help students or professionals to solidify their knowledge, gain practical exposure to the development lifecycle, and showcase their abilities in a competitive yet collaborative environment.

Dr P V Vara Prasad presented on the topic- signal coverage behaviour with FEMTOCELL arrangement.



Dr KVD Kiran presented the topic "Cybersecurity in Disaster Preparedness" During network research meeting.



A meeting was conducted with CISCO academy person as part of skill updating to the faculty.



4. Computing Facilities and Equipments in the center

S. No	Configuration	Qty.
1	OS: Windows 10 Home Processor: Intel(R) core(TM)i3-10100T CPU @3.00 GHz , RAM: 8.00GB, Hard disk: 256GBSSD, Key Board, Optical Mouse	50

Software	Overview	Features
Wireshark	Network protocol analyzer for capturing and interactively analyzing network traffic.	- Deep inspection of hundreds of protocols - Live capture and offline analysis - Rich display filters - Cross-platform (Windows, macOS, Linux) - Customizable with plugins
Snort	Open-source IDS/IPS for real-time traffic analysis and packet logging.	- Real-time traffic analysis - Packet logging - Signature-based detection - Preprocessor support - Access to community rules
OpenVAS	Full-featured vulnerability scanner part of the Greenbone Vulnerability Management (GVM) framework.	- Comprehensive scanning - Regular updates of vulnerability tests - Detailed reporting with mitigation recommendations - User management with role-based access control - Automation with scheduled scans and reports
pfSense	Open-source firewall and router software distribution based on FreeBSD.	- Robust firewall and router capabilities - VPN support (IPsec, OpenVPN, PPTP) - Traffic shaping and bandwidth management - Intrusion detection/prevention (Snort integration) - Extendable with package system

S.No	Equipment name	Cost of the Equipment in lakhs	Sponsored by
1	Desktops (14)	4,97,000	KLEF -
2	GSM Desktop development bundle, Wi-fi development bundle, MIMO development bundle, Cognitive radio development bundle, wireless sensor network bundle	18,58,828	KLEF -

5. PUBLICATIONS

Journal Articles & Conference Articles

Name of the Faculty	Title of the Publication	Name of the Journal/Conference
Dr. Gandharba Swain	Data Hiding and Integrity Verification based on Quotient Value Differencing and Merkle Tree	Arabian Journal for Science and Engineering
Dr. Gandharba Swain	zkHealthChain - Blockchain Enabled Supply Chain in Healthcare Using Zero Knowledge	IFIP Advances in Information and Communication Technology
Dr. Gandharba Swain	Fog-Sec: Secure end-to-end communication in fog-enabled IoT network using permissioned blockchain system	International Journal of Network Management
Dr. Gandharba Swain	Deep Semantic Feature Reduction for Efficient Remote Sensing Image Retrieval	IEEE Access
Dr. Gandharba Swain	Digital Image Steganography With Error Correction on Extracted Data	IEEE Access
Dr. Gandharba Swain	Energy-efficient and delay- sensitive-based data gathering technique for multi-hop WSN using path-constraint mobile element	Wireless Networks
Dr. Gandharba Swain	Efficiency Evaluation Parameters of Digital Image Watermarking Techniques	2023 9th International Conference ICACCS 2023
Dr. Gandharba Swain	Digital Watermarking Analysis Using Data Security	2023 9th International Conference ICACCS 2023
Dr. Gandharba Swain	Image Tamper Detection and Correction Based on Mean Pixel Value and Logistic Map	2023 9th International Conference ICACCS 2023
Dr. Gandharba Swain	Semantic Analysis of Auto- generated Sentences using Quantum Natural Language Processing	Proceedings of the International Conference ICIITCEE 2023
Dr. Gandharba Swain	A Study on Data Security and Privacy Issues in Cloud Computing	Proceedings of the 3rd International Conference ICAIS 2023
Dr. Gandharba Swain	Detecting Macro less and Anti- evasive Malware in Malspam Word Attachments Using Anergy Scoring Methodology	2023 International Conference AICAPS 2023

Dr.K.Rajasekhar	Secure Routing in MANETS Using Adaptive Cuckoo Search and Entropy Based Signature Authentication	Wireless Personal Communications
Dr.K.V.D Kiran	Hierarchical energy efficient secure routing protocol for optimal route selection in wireless body area networks	International Journal of Intelligent Networks
Dr.K.V.D Kiran	Twitter sentiment analysis on online food services based on elephant herd optimization with hybrid deep learning technique	Cluster Computing
Dr.K.V.D Kiran	A novel multi-layer multi-spiking neural network for EEG signal classification using Mini Batch SGD	Soft computing
Dr.K.V.D Kiran	Digital image watermarking based on hybrid FRT-HD-DWT domain and flamingo search optimisation	International Journal of Computational Vision and Robotics
Dr.K.V.D Kiran	A lightweight DPT-MAC protocol to increase the network lifetime in wireless body area networks	International Journal of Modeling, Simulation, and Scientific Computing
Dr.K.V.D Kiran	Linear adversarial vector modeling based intrusion detection using feature subset selection and representation methods	International Journal of System Assurance Engineering and Management
Dr.K.V.D Kiran	Significance of Blockchain Technology in the Healthcare Sector	6th International Conference ICICT 2023
Dr.K.V.D Kiran	Significant Challenges to espouse DevOps Culture in Software Organisations By AWS : A methodical Review	9th International Conference ICACCS 2023
Dr.K.V.D Kiran	Security Auditing Methodology Using Crowdsourced Testing	9th International Conference ICACCS 2023
Dr.K.V.D Kiran	Information Security Using Counter-Anti-Forensics	9th International Conference ICACCS 2023
Dr.K.V.D Kiran	Optimising Face Recognition System using Contrastive Learning and Contrastive Loss	7th International Conference ICCMC 2023
Dr.K.V.D Kiran	Efficient Usage of Spectrum by Using Joint Optimization Channel Allocation Method	Smart Innovation, Systems and Technologies
Mrs.K.Swetha	Automatic Diagnosis of Congenital Conditions in Pediatric Age Using Pupillometry with Machine Learning	Proceedings of the 4th International Conference ICOSEC 2023

Dr.A.Roshini	A lightweight DPT-MAC protocol to increase the network lifetime in wireless body area networks	International Journal of Modeling, Simulation, and Scientific Computing
Dr.A.Roshini	Potential Posture Analysis during Sleep State using Jenkins cycle	2023 9th International Conference ICACCS 2023
Dr.N.Raghavendra Sai	Usage of Deep learning Techniques for Personalized Recognition Systems in Online Shopping	2023 4th International Conference ICESC 2023
Dr.N.Raghavendra Sai	A Comprehensive Survey on Recent Advances in 5G Networks and Mobile Systems	Proceedings - 7th International Conference ICCMC 2023
Dr.G.Krishna Chaitanya	Prevention of Attacks and Flow Control of Firewalls	2023 9th International Conference ICACCS 2023
Mr.R.M.Balajee	Improved Fruit Detection by Image Processing using Deep Learning	2nd International Conference ICSCDS 2023
Mr.R.M.Balajee	Blockchain Technology for Protecting Ingenuity of Image	2023 3rd International Conference ICACITE 2023
Dr.A.Gopi	Sentiment Analysis of Product Reviews by using Naive Bayes and Vader Models	Proceedings - 5th International Conference ICSSIT 2023
Dr.A.Gopi	Intelligent System for Early Diagnosis of Skin Cancer using Bilinear CNN and Soft Attention Approach	2023 4th International Conference ICESC 2023
Dr.A.Gopi	Implementation of IoT Security System by Incorporating Block Chain Technology	Proceedings - 2023 3rd International Conference ICSMDI 2023
Dr.A.Gopi	Predicting the Cotton Leaf Disease using Convolution Neural Networks	2nd International Conference ICSCDS 2023

Dr.A.Gopi	Automated Deep Learning with Wavelet Neural Network based Rice Plant Classification	IDCIoT 2023 - International Conference
Dr.A.Gopi	An Intelligent Framework for Driver Fatigue Detection Based on Hybrid Model of Gradient Boost Decision Tree-CNN-LR	Proceedings of the 5th International Conference ICIRCA 2023
Dr.A.Gopi	Deep convolutional neural network to predict ground water level	Spatial Information Research
Dr.A.Gopi	Real Time Building Crack Visual Measurement System using Metaheuristics with Deep Learning Model	7th International Conference ICOEI 2023

Dr.A.Gopi	Identification of Face by Using CNN and Deep Learning Algorithms	Lecture Notes on Data Engineering and Communications Technologies
Dr.G.Bindu	Investigation of Intelligent Methodologies in Prediction of Depression	Proceedings of the 3rd International Conference ICAIS 2023
Dr.G.Bindu	A Comprehensive Study of Different Security Features in eBanking	Proceedings of the 3rd International Conference ICAIS 2023
Dr.G.Bindu	A Review of Blockchain Technology in Different Sectors: Challenges and Solutions	ICSPC 2023 - 4th International Conference
Dr.G.Bindu	Blockchain of Cryptocurrency Using a Proof-of-Work-Based Consensus Algorithm with an SHA-256 Hash Algorithm to Make Secure Payments	EAI/Springer Innovations in Communication and Computing
Dr.G.Bindu	Blockchain Networks for Cybersecurity Using Machine-Learning Algorithms	EAI/Springer Innovations in Communication and Computing
Dr.G.Bindu	Spectrum Management in 6G HetNet Based on Smart Contracts and Harmonized Software-Defined Networking-Enabled Approach	International Journal of Computer Networks and Applications
Dr.G.Bindu	Deep Learning for Plant Disease Detection and Crop Yield Prediction based on NPP-WPF Analysis in Smart Agriculture	7th International Conference I-SMAC 2023
Dr.G.Bindu	A Survey of Key Challenges in Integrating IoT and Cloud Security	2023 3rd International Conference ICPCSN 2023

Dr.G.Bindu	Transmission of ECG in Android Application by Cloud Server	International Conference ICAISC 2023
Dr.B.Samatha	Cybersecurity Fortification in Edge Computing through the Synergy of Deep Learning	7th International Conference I-SMAC 2023
Dr.B.Samatha	IoT-Enabled Potato Diseases Prediction using Deep Learning	International Conference ICIDCA 2023
Dr.B.Samatha	Analysis of a Multichannel Learning Mechanism for Speech Detection in Social Networks	Proceedings of the International Conference ICIITCEE 2023
Dr.B.Samatha	Classification of potato diseases using deep learning approach	Proceedings of the International Conference ICIITCEE 2023

Dr.B.Samatha	Intrusion Detection System in Vehicular Network using Deep Learning Approach	Proceedings - 5th International onference ICSSIT 2023
Dr.B.Samatha	Design and Deployment of the Road Safety System in Vehicular Network Based on a Distance and Speed	Smart Innovation, Systems and Technologies
Dr.K.Amarendra	A CNN Based Attendance Management System Using Face Recognition	Proceedings of the 4th International Conference ICOSEC 2023
Dr.K.Amarendra	Revolutionizing Fingerprint Forensics: Regeneration and Gender Prediction with Gabor Filters, Otsu's Technique, and Deep Learning	Proceedings of the 2023 2nd International Conference ICAISS 2023
Dr.K.Amarendra	Enhanced Texture Analysis to Detect Fabric Stain Using Deep Learning and Gabor Filter	Proceedings of the 5th International Conference ICIRCA 2023
Dr.K.Amarendra	Investigating the Impact of Containerization on the Deployment Process in DevOps	Proceedings of the 2nd International Conference ICECAA 2023
Dr.K.Amarendra	Lung Cancer Detection by Harnessing the Power of Deep Learning with Convolutional Neural Networks	Proceedings of the 2nd International Conference ICECAA 2023

Dr.K.Amarendra	Deploying a Build Job Orchestration in Docker	2nd International Conference ICECAA 2023
Dr.K.Amarendra	An efficient fuzzy model-based intrusion detection system for secured IOT network	Soft Computing
Dr.K.Amarendra	Comparative Study on Forecasting Techniques by using Cloud Services	2nd International Conference ICSCDS 2023
Dr.K.Amarendra	A Study on Cloud and IoT based Accident Detection & Prevention Systems	2nd International Conference ICSCDS 2023
Dr.K.Amarendra	Natural Language Processing using Convolutional Neural Network	Proceedings - 7th International Conference ICCMC 2023
Dr.T.Venkata Satya Vivek	Deep learning-based video coding optimisation of H.265	International Journal of Engineering Systems Modelling and Simulation
Dr.Nagarjuna Karyemsetty	Cybersecurity Fortification in Edge Computing through the Synergy of Deep Learning	7th International Conference I-SMAC 2023

Dr.Nagarjuna Karyemsetty	IoT-Enabled Potato Diseases Prediction using Deep Learning	International Conference ICIDCA 2023 - Proceedings
Dr.Nagarjuna Karyemsetty	Analysis of a Multichannel Learning Mechanism for Speech Detection in Social Networks	Proceedings of the International Conference ICIITCEE 2023
Dr.Nagarjuna Karyemsetty	Intrusion Detection System in Vehicular Network using Deep Learning Approach	Proceedings - 5th International Conference ICSSIT 2023
Dr.Nagarjuna Karyemsetty	Design and Deployment of the Road Safety System in Vehicular Network Based on a Distance and Speed	Smart Innovation, Systems and Technologies
Mr.M.Chandan	IoT based Coal Mining Monitoring and Control	Proceedings of the 2nd International Conference ICAAIC 2023
Mr.M.Chandan	A Successful Spam Detection Technique for Industrial IoT Devices based on Machine Learning Techniques	Proceedings of the 2nd International Conference ICAAIC 2023
Mr.M.Chandan	Self-Healing for Software Defined Networking	Proceedings of the 2nd International Conference ICAAIC 2023
Mr.M.Chandan	Application of Deep Neural Networks for Weed Detection and Classification	Proceedings of the 2nd International Conference ICAAIC 2023
Dr.G.Jagadish	Deploying a Build Job Orchestration in Docker	Proceedings of the 2nd International Conference ICECAA 2023
Dr.M.Anusha	Improving the Performance of Routing Protocols in MANETs: A Mathematical Model for Evaluating Intermediate Bottleneck Nodes	SSRG International Journal of Electronics and Communication Engineering
Dr. Asesh Kumar Tripathy	Dynamic Multi-Path Routing Protocol Hinged On Fitness Value Using Ga In Mobile Adhoc Networks	Journal of Theoretical and Applied Information Technology, 2024, 102(5), pp. 2152–2161
Dr. Asesh Kumar Tripathy	Energy Aware Routing through Genetic Algorithm and AOMDV in MANET	International Journal of Intelligent Systems and Applications in Engineering, 2024, 12(8), pp. 435–441

Patents Published by Faculty Members

Name of the Inventor/co-inventor	Patent Number	Date of Award	Agency
Nagarjuna Karyemsetty	202241017074	01-04-2022	IP India
Dr. M. Anusha	202241027538	27/05/2022	IP India
Dr.K V D Kiran	202141057661	04/02/2022	IP India
Dr. K Ruth Ramya Kalangi	202241040728	22/07/2022	IP India
A. Roshini ,Dr. K.V.D. Kiran	202241044120	05-08-2022	IP India
Dr. Jagadish Gurrala	202211044394	19/08/2022	IP India
Dr. K. V. D. Kiran, Ms. Sai Sudha Gadde	202241075089	02/2023	IP India
Dr. Gandharba Swain	202341005702	05/2023	IP India
Dr. Gogineni Krishna Chaitanya	202341011275	11/2023	IP India
Dr. Jagadish Gurrala	202341015539	11/2023	IP India
Dr. Garikapati Bindu	202341019485	13/2023	IP India
Dr. Ruth Ramya Kalangi	202341020332	14/2023	IP India
Dr.Bhabendu Kumar Mohanta	202331037654	22/2023	IP India

Books and Book Chapters Authored by Faculty Members of the Center

Books Authored

Auth ors	Title	Name Of The Book	Year	ISBN Number
Aditya Kumar Sahu, Gandharba Swain	An Improved Method for High Hiding Capacity Based On LSB And PVD, Digital Media Steganography	Digital Media Steganography	2020	97801281 94386 BOOK

Books Chapters Authored

Auth ors	Title	Name Of The Book	Year	ISBN Number
Aditya Kumar Sahu, Gandharba Swain	An Improved Method for High Hiding Capacity Based On LSB And PVD, Digital Media Steganography	Digital Media Steganography	2020	97801281 94386 BOOK
Anita Pradhan, K. Raja Sekhar, Gandharba Swain	Image Steganography Using Add-Sub Based QVD And Side Match	Digital Media Steganography		97801281 94386
Dr.K.V.D.Kiran, S. Sri Harsha	An Adequacy of Safe Philosophy On Correspondence And Joint Effort With Schooling Oriented Projects-	Impact of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Dr.K.V.D. Kiran, Roshini.A	A Novel Sleep Posture Analysis On Covid-19 Victims Using Enhanced Jenkins Sleep Cycle -	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Dr.K.V.D.Kiran, Mrs.A.Roshini	Technique Of Information Security Risk Analysis For Virtualized Systems	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Dr.K.V.D.Kiran, MrP.V.Vara Prasad	Supervision Security Scheme In Telecommunication Networks	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78

Dr.K.V.D.Kiran, Mrs.K.Swetha	A Risk-Driven Speculation Replica For Analyzing Human Factors In Information Security -	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Dr.K.V.D.Kiran, Roshini.A.,	Challenges In Physiological Signal Extraction From Cognitive Radio Wireless Body Area Networks For Emotion Recognition	Advances In Intelligent Systems And Computing	2020- 2021	2194-5365
Dr.K.V.D.Kiran, G. Sai Sudha	A Study Of Organizational Information Security Risk Analysis -	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Dr.K.V.D.Kiran, Roshini.A.,	MAC-Based Physiological Signal Extraction Approach For WBAN On Body Postures	Proceedings - 4th International Conference ICSSIT 2022	2022	97898116 36899
Roshini A., Dr.K.V.D.Kiran, Anudeep K.V.	Hybrid Acknowledgment Scheme For Early Malicious Node Detection In Wireless Sensor Networks	Advances In Intelligent Systems And Computing	2021	21945357
Gadde S.S., Dr.K.V.D.Kiran,	DMERCNET: A Quirky Deep Learning Classifier For Diabetic Retinopathy And Macular Edema Risk Using CNN	2022 IEEE Delhi Section Conference, DELCON 2022	2022	97816654 80352
Ruth Ramya, K., Sasidhar, T.	A Review On Security Aspects Of Data Storage In Cloud Computing-	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Vamshinath, N., Ruth Ramya, K., Krishna, S.,	Homomorphic Encryption For Cluster In Cloud-	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Radhika Rani Chintala1, Narasingarao M R2, Somu Venkateswarlu3	Modelling An Energy Efficient Lightweight Encryption Algorithm Suitable For Medical Applications -	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020- 2021	978- 30303082 78
Radhika Rani Chintala	Performance Metrics And Energy Evaluation Of A Lightweight Block Cipher In Human Sensor	Impact Of Multidisciplinary Computation Trends On Automated	2020- 2021	978- 30303082 78

	Networks -	Systems		
Chaitanyakrishna, B., Ch. Radhika Ran	A Novel Approach For Risk Management And Information Security In Distributed Health Care Systems - I	Impact Of Multidisciplinary Computation Trends On Automated Systems	2020-2021	978-3030308278
Rooban S., Eshwar I.V.S., Radhika R., Kumar M.D., Krishna K.C.	Reliable Low-Cost High-Speed And Direction-Controlled Surveillance Robot	Smart Innovation, Systems And Technologies	2021	21903018
G.Krishnachaitanya, M. Venkatanarash	Novel Approach Of Fft Using Cordic Algorithm And Analyzed With ChipScope Pro -	Impact of Multidisciplinary Computation Trends On Automated Systems	2020-2021	978-3030308278
Chaitanya C., Reddy C.N., Vignesh K.S., Krishna P.R., Roshini A., Swetha K.	Enhanced Hash Based Image Steganography Technique To Increase Data Integrity And Confidentiality	2021 7th International Conference ICACCS 2021	2021	9.78167E+12
Akshara Vemuri S., Krishna Chaitanya G.	Insider Attack Detection And Prevention Using Server Authentication Using Elgamal Encryption	5th International Conference ICICT 2022 - Proceedings	2022	9781665437899
Dr.K.V.D.Kiran, Mr.P.V.Vara Prasad	Supervision Security Scheme In Telecommunication Networks	Impact of Multidisciplinary Computation Trends On Automated Systems	2020-2021	978-3030308278

6. List of Scholars Awarded PhD Degree

Supervised by Dr Gandharba Swain

1. **Aditya Kumar Sahu:** Registered no. 15303152, awarded PhD from K L University in June 2020. Thesis title: Development of higher embedding capacity and lower distortion image steganography techniques using the principles of LSB, LSB matching, PVD and

modulus function

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/301302>

2. **Anita Pradhan**: Registered no. 15303192, awarded PhD from K L University in July 2020, **Thesis title**: Image steganography techniques based on adaptive pixel value differencing and exploiting multi-directional edges. I was the **Informal guide**: identified the research gaps and objectives for this scholar and acted as corresponding author for all the 6 articles published for her PhD work. Formal Guide: Dr K. Raja Sekhar.

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/300372>

3. **Smita Chaudhari**, Registered no. 163030004, awarded PhD from K L University in April 2022, Thesis Title: Cloud Data Integrity and Security Preservation using Improved Cryptographic Algorithms.

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/395968>

4. **Reshma Sonar**, Registered no. 14303031, awarded PhD from K L University in July 2022 under my guidance, Thesis Title: Steganography and Steganalysis Techniques based on Fall off Boundary Problem, Unused Block Problem and Multi-directional Edges.

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/396347>

5. **B. Nanditha**, Registered no. 15303159, awarded PhD from K L University in September 2022 under my guidance. Title of thesis: Achieving Energy Efficiency of MANET by reducing the effect of Overhearing and Congestion.

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/468382>

6. **Snehalata Funde**, Registered no. 163030005. Awarded PhD from K L University in September 2023. Title of research work: Path hiding privacy preserving approach for classified big data.

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/555864>

7. **Hyder Ali Hingoliwala**, Registered no. 15303196. Awarded PhD from K L University in 1st April 2024. Title of research work: Improving Quality of Service Parameters in Wireless Sensor Networks.

Link of thesis in Shodhaganga: <https://shodhganga.inflibnet.ac.in/handle/10603/560802>

8. **K. Abdul Basith**, Registered no. 163030066. Awarded PhD from K L University in 13th June 2024. Title of research work: Detection of Distributed Denial of Service Attack in Wireless Sensor Networks.

Link of thesis in Shodhaganga: [yet to come in shodhaganga](#)

9. SNVJ Devi Kosuru, Registered no.2002030003, Submitted thesis on 6.07.2024 for adjudication, Title of research work: Development of Image Tamper Detection and Correction Techniques based on Pixel Value Differencing, and Extended Hamming Code

Supervised by Dr.K.V.D.Kiran

1. **Shirisha N**, Registered no. 15303167. Awarded PhD from K L University in 22 Nov-2021. Title of research work: IMPROVED CRYPTOGRAPHIC BASED MODEL FOR BIG DATA SECURITY IN DISTRIBUTED ENVIRONMENT Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/465993>
2. **PV Vara Prasad**, Registered no. 13303035. Awarded PhD from K L University in 17-Mar-2022. Title of research work: IMPROVED HANDOFF METHOD FOR INFILTRATING-MOVING USER EQUIPMENT'S IN CELLULAR COMPOSITE NETWORKS. Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/396348>
3. **Katikireddy Srinivas**, Registered no. 13303051. Awarded PhD from K L University in 07-Jun-2022. Title of research work: An Effective System for Thyroid Data Using Amalgamation of Clustering Methods. Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/466515>
4. **Kale Navnath Dattatraya** , Registered no. 13303032. Awarded PhD from K L University in 14-Nov-2022. Title of research work: Hybrid based Cluster Head selection for Maximizing Network Lifetime and Energy Efficiency in Wireless Sensor Network . Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/467946>
5. **VVS Sasank**, Registered no. 183030084. Awarded PhD from K L University in 07-Apr-2023. Title of research work: An Optimized Brain Tumor Detection System Using Deep Learning Approaches. Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/483752>
6. **Roshini A**, Registered no. 163030094. Awarded PhD from K L University in 19-May-2023. Title of research work: A HIERARCHICAL TRAFFIC PRIORITY-MAC APPROACH FOR POSTURE BASED POTENTIAL KEY FRAME DETECTION IN WIRELESS BODY AREA NETWORKS. Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/536229>
7. **Sai Sudha Gadde**, Registered no. 163030098. Awarded PhD from K L University in 27-June-2023. Title of research work: Automated Synergic Model to detect and classify the Disease in Funds Images with Entropy based processing for Early Intervention of Diabetic Retinopathy. Link of thesis in Shodhaganga: <http://hdl.handle.net/10603/536224>

7. Research Collaborators

1	<p>Prof. <u>Adnan Gutub</u> Professor of Computer Engineering, College of Computer and Information Systems Umm Al-Qura University, Makkah - Saudi Arabia, <u>Email id:</u> aagutub@uqu.edu.sa</p>
2	<p>Dr <u>M. Hassaballah</u>, Professor, Department of Computer Science, Faculty of Computers and Information South Valley University, Luxor, 85833 Egypt, <u>Email id:</u> m.hassaballah@fci.svu.edu.eg</p>
3	<p>Dr. Anand Nayyar Graduate School, Faculty of Information Technology, Duy Tan University, Da Nang 550000, Viet nam, Email: anandnayyar@duytan.edu.vn</p>
4	<p>Dr Alaa O. Khadidos Associate Professor, Department of Information Systems, Faculty of Computing and Information Technology, King Abdulaziz University, Jeddah 21589, Saudi Arabia</p>
5	<p>Dr Mohamed Abbas Associate Professor, Electrical Engineering Department, College of Engineering, King Khalid University, Abha 61421, Saudi Arabia. mabas@kku.edu.sa</p>
6	<p>Dr Mehdi Hussain Assistant Professor, School of Electrical Engineering and Computer Science, National University of Science and Technology, NUST-SEECS, Sector H-12, Islamabad, Pakistan mehdi.hussain@seecs.edu.pk</p>
7	<p>Dr <u>Bobiao Guo</u>, College of Computer Science and Software Engineering, Hohai University, Nanjing 210098, China, E-mail: guobobiao@163.com</p>
8	<p>Dr Wassim Alexan Communications department, Faculty of Information Engineering and Technology, German University in Cairo (GUC), New Cairo 11835, Egypt, e-mail: wassim.alexan@ieee.org</p>
9	<p>Dr Aditya Kumar Sahu Associate Professor, Amrita School of Computing, Amrita Vishwa Vidyapeetham, Amaravati, 522503, Andhra Pradesh, India, adityasahu.cse@gmail.com</p>
10	<p>Dr. Naweena Kumar, School of Computer Science Engineering and Technology, Bennett University, Greater Noida-201310, U.P., India kr.naweena@gmail.com</p>
11	<p>Dr. Ranjan K. Senapati Professor, Department of ECE, VNR Vignana Jyothi Institute of Engineering and Technology, Bachupally, Nizampet (S.O), Hyderabad, Telangana, pin-500090 ranjan_ks@vnrvjiet.in, rksphd@gmail.com</p>
12	<p>Dr Erukala Suresh Babu Assistant professor, Department of CSE, National Institute of Technology, Warangal, pin- 506004, India, esbabu@nitw.ac.in</p>
13	<p>Dr Jatindra Kumar Dash</p>

	Associate Professor, Department of Computer Science and Engineering, SRM University-AP, 522502, Andhra Pradesh, India, jatinkdash@gmail.com , jatindrakumar.d@srmmap.edu.in
14	Dr Ashok Kumar Pradhan Associate Professor, Department of Computer Science and Engineering, SRM University-AP, Andhra Pradesh, India, 522240 ashokkumar.p@srmmap.edu.in
15	Dr. J. Hemalatha Department of Computer Science and Engineering, AAA college of Engineering and Technology, Amathur, Sivakasi, Tamilnadu, 626123, India. jhemalathakumar@gmail.com
16	Dr. R. Roselin Kiruba Department of SOC Vel Tech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology, Avadi, Chennai, India, kirubaroselin@gmail.com
17	Dr. Pramoda Patro School of Computer Science and Artificial Intelligence, SR University, Warangal, Telangana, 506371, India