Name of Faculty Dr. S KRANTHI KUMAR Designation Associate Professor Nature of Job/Appointment Regular 18-08-2023 Date of Joining E-mail kranthikumars\_cet@cbit.ac.in **Education Qualifications** Name of the Degree Class Ph. D Doctor of Philosophy (CSE) Awarded PG M. Tech. (CSE) and M. Tech. (IT) First Class B. Tech. (CSE) First Class UG **Work Experience** Teaching 12 Years Research 05 Years Industry 05 Years Others 2 Years (SME and Content Creator) Cyber Security, Computer Networks, Applied Cryptography, Cloud Area of Specialization Security, Internet of Things, Block chain, and Data Analytics MISTE, MCSI, MIAENG, MIFERP Professional Memberships Teaching, Research Responsibilities held at Institution Level Responsibilities held at Department Teaching, Research. Level Uriti Archana Topic: Quantum Machine Learning: Harnessing the Power of Quantum Computing for Improved Data Analysis (tentative) Status: Ongoing Ramakrishnam Raju Mandapati Towards Secure Quantum Key Topic: Distribution: Investigating the Impact of Noise and Channel Loss (tentative) Status: Ongoing Satyabrata Patro Research Guidance Topic: Cloud Access Control with CP-ABE: Developing Secure and Scalable Schemes for Multi-user Data Sharing (tentative) Status: Ongoing Priyanka Dash Topic: Privacy-Preserving Data Sharing in the Cloud with Attribute-Based Encryption: Investigating the Impact of Data Heterogeneity and Access Policies (tentative) Status: Ongoing

Awards Received

 Governors National Award for Excellence in Research and Development

Awarding Body: GRA (Governors National Award) Approved by: Ministry of Science and Technology

Date: October 2018
2. Global Teacher Award

Awarding Body: AKS
Event: Gala Ceremony
Date: December 2020
3. Bharat Gaurav Puraskar

Courses Handled at Under Graduate / Post Graduate Level.

No. of Papers Published

**Projects Carried out** 

**Patents** 

Technology Transfer

Awarding Body: KTK Outstanding Achievers and Education Foundation and Helium Production, Date: April 2023.

Computer Networks, Cryptography, and Network Security, Unix Shell Programming, Linux Internals, Design and Analysis of Algorithms, Programming through C, Data Structures, OOPS through JAVA, Database Management Systems, Operating Systems, ETL technologies, Informatica, DataStage, Autosys.

National Journals - 00 International Journals: 18

National Conference - 00 International Conference: 02

 Project: Consultancy project from Edwisley – an Al-Driven Learning Technology software company in Hyderabad, Telangana.

Date: Feb 2023
Role: Content Creator
Status: Ongoing

2. Project: RMW, EDW, EDQ, ESP for TIAA-CREF

Feb 2015 (1.6 years)

Role: ETL Data Processing

Status: Completed

1. A patent filed and published entitled "SYSTEM AND METHOD FOR DETECTING AND FORECASTING CYBER-ATTACKS USING ARTIFICIAL INTELLIGENCE BASED CYBER SECURITY HUB" on July 2020 with application number 202241039146 with GITAM Deemed to be University as an Applicant.

2. A patent filed and published entitled "SYSTEM FOR DETECTING QUALITY OF FOOD IN REAL-TIME" on Feb 2020 with application number 202241002743 with GITAM Deemed to be University as an Applicant.

 A patent filed and published entitled "Critical Patients' Monitoring System" on June 2020 with application number 202041023578

 A patent filed and published entitled "Device for Connecting Computers" on Dec 2020 with application number 201944022782

 A patent filed and published entitled "VIGYA: A Novel Integral System for Precision Agriculture" on September 2019 with application number 201941033006

6. A patent filed and published entitled "ISPCD-SYSTEM: Internal Smart Pollution Control Display System" on November 2019 with application number 201821015630

7. A patent filed and published entitled "FIGFPD-SYSTEM: Fuel Indicator and Global Fuel Pump Detection System" on May 2018 with application number 201821015644

 A patent filed and published entitled "P-BUTTON: Panic Button Provides Information through Light, Radio Signal and Other Required Signal" on November 2018 with application number 201821042817.

APSSDC SPOC.

2. SME and Content Management -Ed Wisely

 Certified in "Mentoring Educators in Education Technology" organized by IIT Bombay and approved by AICTE, PMMMNMTT, MHRD, Govt. of India from May 2018 – July 2018.

 Certified in Pedagogy for Online and Blended Teaching-Learning Process organized by IIT Bombay and approved by AICTE, PMMNMTT, MHRD, Govt. of India from September 2017 – October 2017.

 Certified in Foundation Program in ICT for Education" conducted by IIT Bombay and approved by AICTE, PMMMNMTT, MHRD, Govt. of India from August – September 2017.

- Invited as the keynote speaker for (world congress) International Conference on Orphan Drugs and Rare Diseases, Magnus group during August 17-19, 2023.
- Invited as an expert speaker to deliver hands-on session on "Data Processing and ETL using Informatica", Dept. of CSE, 3. Vignan's Institute of Engineering for Women, Vizag, Sep 2021.
- 4. Invited as an expert speaker to deliver hands-on session on "Real time Data Integration Services", AICTE-ISTE one-week online induction/refresher programme on advanced engineering trends in CSE & IT, Usharama Inst. Of ENgg. And Tech. Feb 24th 2021.
- 5. Invited as an expert speaker to deliver hands-on session on "Network traffic monitoring and packet sniffing", Dept. of E.C.E, RISE Krishna Sai Prakasam Group of Institutions, Ongole, July 2020.
- 6. Invited as an expert speaker to deliver hands-on session on "Network models and packet analysis", Department of Computer Engineering, SIT, Pune, July 2020.
- 7. Invited as an expert speaker to deliver hands-on session on "Open source monitoring tools", Department of C.S.E. MeRITS, August 2020.
- 7. 8. Nominated as a resource person for one-week workshop on "Learning by Doing (ICT Tools)
- & Awareness on Platforms for Synchronous and Asynchronous Online Teaching", organized in collaboration with CSI held from 6th to 11th of July 2020 in the Dept. of CSE, VNRVJIET, Hyd.
  - Nominated as a resource person for LINUX for one week fdp on "LINUX Foundation & DS Implementation", organized in collaboration with CSI held from 11th to 16th of May 2020 in the Department of CSE, VNR VJIET, Hyd.
- 10. Nominated as a resource person for three-day workshop on "Effective Utilization of Digital Platforms for Teaching and Learning Process", organized by management from 16th to 18th of May 2020 in the institute level, VNR VJIET, Hyd.
- 11. 11. Nominated as a resource person for LINUX during threeday skill development program on "LINUX & ICT Tools", organized in collaboration with CSI held from 24th to 26th of June 2019 in the Department of CSE, VNR VJIET, Hyd.
- 12. 12. Nominated as a resource person for Five-Day Short-Term Training Program on "Applied Cryptography and Security Mechanisms" organized in collaboration with CSI held from 3rd to 8th December 2018, in the Dept. of CSE, VNR VJIET.
- 13. Nominated as a resource person for "Informatica M. Tech Internship Recruitment Process- Training" held from 2nd to 12th May 2018, in the Dept. of CSE, VNR VJIET.
- 14. Nominated as a resource person for two-week Short-Term Training Program on "R Programming" in collaboration with CSI held from 21st to 26th May 2018 organized by the Department of CSE, VNRVJIET.
- 15. Invited as an expert speaker on "Contribution of ETL Mechanism for processing of data from OLTP to OLAP", Department of Computer Engineering, Sinhgad Institute of Technology, Pune, July 2016.
- 16. 16. Invited as an expert speaker to deliver hands-on session on "Data Processing using INFORMATICA Transformations", Department of Computer Engineering, JSPM Narhe Technical Campus, Pune, January 2015.
- 17. Invited as an expert speaker to deliver hands-on session on "Extraction, Transforming and Loading Data using DATASTAGE", Department of Computer Engineering, Bharti Vidyapeeth College of Engineering, Pune, December 2015.
   Kiran Kumar, M., Kranthi Kumar, S., Kalpana, E., Srikanth, D.,
  - & Saikumar, K., A Novel Implementation of Linux Based Android Platform for Client and Server. Source: A Fusion of Artificial Intelligence and Internet of Things for Emerging Cyber Systems, (2022).

Publisher: Springer & 18684394, Pages: 151-170.

Invited Speaker

No. of Books/Chapter Published with details

- Sasank, V. V. S., Singamaneni, K. K., Murthy, A. S. D., & Ahammad, S. H., Executing CNN-LSTM Algorithm for Recognizable Proof of Cervical Spondylosis Infection on Spinal Cord MRI Image: Machine Learning Image.
   Source: In Handbook of Research on Innovations and Applications of AI, IoT, and Cognitive Technologies (2021) Publisher: IGI Global, Pages: 468-484
- Received a Participation Certificate on "National Level Online Boot camp of Career Building with Python" from 1st – 7th June 2020 by Codegnan IT Solutions OPC Pvt. Ltd.
- Received a Participation Certificate on "Data Visualization with R Programming" from 15th –17th May 2020 by Codegnan IT Solutions OPC Pvt. Ltd.
- Conducted the student project presentation at the "OPEN HOUSE" Project Expo, Institute level as Coordinator VNR VJIET, March 2020.
- 4. Participated in a one-week FDP on "Natural Language Processing" jointly organized by Electronics and ICT academies, NIT Patna in association with Dept. of CSE & ECE, IEEE & ISTE, VNR VJIET from 6th 10th January, 2020 through National Knowledge Network under the "Scheme of Financial assistance for setting up of Electronics and ICT academies" by the Ministry of Electronics and Information Technology (MeitY), Govt. of India, This Programme is endorsed by AICTE / UGC / NBA.
- 5. Participated in DST-sponsored two-week FDP on "AI, Machine Learning and Deep LearningApplications to Smart Grid" from 25th November to 6th December 2019.
- 6. Conducted the student project presentation at the "OPEN HOUSE" Project Expo, Institute level as Coordinator VNR VJIET, March 2019.
- Conducted a five-day short-term training program on "Applied Cryptography and Security Mechanisms" as a Convener from 8th March to December 2018, organized by Dept. of CSE, VNR VJIET, December 2018.
- 8. Participated in the "International Conference on Multidisciplinary Research", 2017-18 held on 10th November 2018 organized by Global Research Academy approved by Science and Technology, Govt. of India.
- Participated in a one-week workshop on "Big Data Analytics" conducted by the Dept. of CSE, VNR VJIET, in collaboration with CSI from 25th to 30th June 2018.
- Participated in MeitY, Govt. if India, sponsored one-week FDP on "Applied Cryptography" organized by the E & ICT Academy, NIT, Warangal at GITAM (Deemed to be University), Vizag from 27th April to 2nd May 2018.
- 11. Participated in MeitY, Govt. of India, sponsored FDP on "Data Analytics with R" organized by E & ICT Academy, NIT, Warangal at VNR VJIET, Hyderabad from 15th May to 20th May 2017.
- Conducted a three-day national level workshop on "Recent Trends in Image and Video Processing" as a coordinator from 20th to 22nd March 2017 under TEQIP-II, organized by Dept. of CSE, VNR VJIET.
- 13. Participated in MeitY, Govt. of India, sponsored FDP on "Sensor Networks and Internet of Things" organized by E & ICT Academy, NIT, Warangal at The Dept. of CSE, VNR VJIET, Hyderabad from 27th November to 2nd December 2016.

Details of Short-Term Training Programs/ Faculty Development Programs/ Seminars/ Workshops. Other Trainings (Attended and/ or Organized).

Details of Journal Publications/ Conferences (National and International)

## International /National Conferences

- Singamaneni, Kranthi, Abdullah Shawan Alotaibi, and Purnendu Shekhar Pandey. "The Performance Analysis and Security Aspects of MANET." ECS Transactions, vol. 107, no. 1, 2022, pp. 10945-10955. DOI: 10.18293/ECST.2022.107.1.
- Singamaneni, Kranthi, Abdullah Shawan Alotaibi, and Purnendu Shekhar Pandey. "The Performance Analysis and Security Aspects of Manet." ECS Transactions 107.1 (2022): 10945.

## **International/ National Journals**

- 1. Singamaneni, Kranthi Kumar, and P. Sanyasi Naidu. "An efficient quantum hash-based CP-ABE framework on cloud storage data." International Journal of Advanced Intelligence Paradigms 22.3-4 (2022): 336-347.
- 2. Singamaneni, Kranthi Kumar, et al. "An Efficient Hybrid QHCP-ABE Model to Improve Cloud Data Integrity and Confidentiality." Electronics 11.21 (2022): 3510.
- 3. Singamaneni, Kranthi Kumar, et al. "A novel QKD approach to enhance IIOT privacy and computational knacks." Sensors 22.18 (2022): 6741.
- 4. Singamaneni, Kranthi Kumar, et al. "An Enhanced Dynamic Nonlinear Polynomial Integrity-Based QHCP-ABE Framework for Big Data Privacy and Security." Security and Communication Networks 2022 (2022).
- Kiran Kumar, M., et al. "A Novel Implementation of Linux Based Android Platform for Client and Server."
   A Fusion of Artificial Intelligence and Internet of Things for Emerging Cyber Systems (2022): 151-170.
- 6. Singamaneni, Kranthi Kumar, et al. "A novel blockchain and Bi-linear polynomial-based QCP-ABE framework for privacy and security over the complex cloud data." Sensors 21.21 (2021): 7300.
- 7. Singamaneni, Kranthi Kumar, and Sanyasi Naidu Pasala. "An improved dynamic polynomial integrity based QCP-ABE framework on large cloud data security." International Journal of Knowledge-Based and Intelligent Engineering Systems 24.2 (2020): 145-156.
- and Intelligent Engineering Systems 24.2 (2020): 145-156.
  Singamaneni, Kranthi Kumar, and Pasala Sanyasi Naidu. "IBLIND Quantum Computing and HASBE for Secure Cloud Data Storage and Accessing." Rev. d'Intelligence Artif. 33.1 (2019): 33-37.
- 9. Singamaneni, Kranthi Kumar, and Pasala Naidu. "Secure key management in cloud environment using quantum cryptography." Ingénierie des Systèmes d'Information 23.5 (2018).
- 10. Singamaneni, Kranthi Kumar, Pasala Sanyasi Naidu, and Pasupuleti Venkata Siva Kumar. "Efficient quantum cryptography technique for key distribution." J. Eur. Systèmes Autom 51 (2018): 283.
- 11. Singamaneni, Kranthi Kumar, SV Bharath Kumar Reddy, and Ü. Sreenivasulu. "A novel framework to enterprise smart city with IOT and analytics." Journal of Neutrosophic and Fuzzy Systems 1.1 (2021): 37-7
- 12. Kumar, Singamaneni Kranthi, et al. "Stock Price Prediction Using Optimal Network Based Twitter Sentiment Analysis." Intelligent Automation & Soft Computing 33.2 (2022).
- 13. Al-Atroshi, C., Rene Beulah, J., Singamaneni, K.K., Pretty Diana Cyril, C., Neelakandan, S. and Velmurugan, S., 2022. Automated speech-based evaluation of mild cognitive impairment and Alzheimer's disease detection using with deep belief network model. International Journal of Healthcare Management, pp.1-11.
- Murari, T., Prathiba, L., Singamaneni, K.K., Venu, D., Nassa, V.K., Kohar, R. and Uparkar, S.S., 2022.
   Big Data Analytics with OENN Based Clinical Decision Support System. Intelligent Automation & Soft Computing, 31(2).
- 15. Sasank, V. V. S., Singamaneni, K. K., Murthy, A. S. D., & Ahammad, S. H. (2021). Executing CNN-LSTM Algorithm for Recognizable Proof of Cervical Spondylosis Infection on Spinal Cord MRI Image: Machine Learning Image. In Handbook of Research on Innovations and Applications of AI, IoT, and Cognitive Technologies (pp. 468-484). IGI Global.
- 16. S. Kranthi Kumar, B. Thulasi. (2020). A Novel Integrated Approach to Predict Bitcoin Price using LSTM of RNN, GBDT and Gated Recurrent Unit Architecture. International Journal of Advanced Science and Technology, 29(3), 9128 9134.
- 17. Singamaneni, K., et al. "Exploration of convolutional neural network with node-centred intrusion detection structure plan for green cloud." Journal of Green Engineering (2020).
- 18. Kumar, S. Kranthi, PV Siva Kumar, and M. Venkata Krishna Rao. "A Comparative Study of Different Attribute- Based Encryption Models for Cloud Data Security." (2017).