## CURRICULUM VITAE

#### Dr. Koteswararao CH

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Google Scholar: lrf8fDsAAAAJ

Vidwan ID: **302836** 



#### **Objective**

To be a part of the challenging team, which strives for the better growth of the organization and which explores my potential and provides me with the opportunity to enhance my talent with an intention to be an asset to the organization.

### Research Interests

Cryptography & Network Security, Information Security, Secure Multi-party Computation,

Oblivious Data and Algorithms.

#### Education

Ph.D (CSE) Full-Time MHRD Stipendiary August 2016 - April 2021 Thesis Topic: Study on Applications of Secure Multi-party Computation and Obliv-

ious Graph Algorithms

Research Guide: Dr. Kunwar Singh, Associate Professor & HOD, Dept. of CSE Institution: National Institute of Technology, Tiruchirappalli, Tamil Nadu.

M.Tech.(C.S.E) - I Class with Distinction (73.5%), 2007 - 2009 Institution: J.N.T.U Kakinada Campus, Kakinada, Andhra Pradesh

University: J.N.T.U Kakinada, Andhra Pradesh.

## B. Tech. (I.S.T) - I Class (69.8%)

Aug. 2000 - April 2004

Institution: Bapatla Engineering College, Bapatla, Andhra Pradesh University: Acharya Nagarjuna University, Guntur, Andhra Pradesh.

#### Intermediate - I Class with Distinction(71.00%)

1998 - 2000

Institution: Ponnur Junior College, Ponnur, Andhra Pradesh Board: Board of Intermediate Education, Hyderabad, A.P.

## S.S.C - I Class with Distinction (85.00%)

1998

Institution: Zilla Parisath High School, Chintalapudi, Ponnur, Andhra Pradesh

Board: Board of Secondary School Certificate, Hyderabad, A.P.

### Work Experience

Associate Professor, Department of Information Technology, SoS Engineering and Technology, Guru Ghasidas Vishwavidyalaya (A Central University) from April 2025 to Till Date. Koni, Bilaspur. C.G.

Assistant Professor Senior Grade from 20 April 2021 to April 2025 VIT-AP University, Amaravathi, Andhra Pradesh.

A Full-time Research Fellow (SRF) PhD Scholar Aug-2016 to April-2021. National Institute of Technology - Trichy, Tamilnadu, India.

Assistant Professor from October 2010 to August 2016 Department of Computer Science and Engineering PACE Institute of Technology and Sciences, Ongole, Andhra Pradesh.

Assistant Professor, September 2009 - July 2010 Department of Information Technology Guntur Engineering College, Guntur, Andhra Pradesh.

Lecturer, September 2004 - July 2007

Department of Computer Science and Engineering

VRS & YRN College of Engineering and Technology, Chirala, Andhra Pradesh.

## Refereed Journal Publications

#### **Academic Journals Information**

- 1. Yamarthy, A.K., **Koteswararao C** MDepthNet based phishing attack detection using integrated deep learning methodologies for cyber security enhancement, Cluster Computing, 2024, 27(5), pp. 6377–6395. **Q1 SCIE, IF 3.6**
- 2. Ch, K.R., Singh, K., Kumar, A. The oblivious comparison sorting protocols for secure multi-party computation, Multimedia Tools and Applications, 2024, 83(26), pp. 67763–67777. Q1, SCIE, IF 3.0
- 3. Saikam, J., Ch, K. An ensemble approach-based intrusion detection system utilizing ISHO-HBA and SE-ResNet152, International Journal of Information Security, 2024, 23(2), pp. 1037–1054. Q2, SCIE, IF 2.4
- Pramodh Krishna D., E. Sandhya, Khaja Shareef Sk, Srihari Varma Mantena, Venkata Subbaiah Desanamukula, Ch Koteswararao, Srinivasa Rao Vemula & MaruthiVemula, Enhancing security and efficiency in Mobile Ad Hoc Networks using a hybrid deep-learning model for flooding attack detection, Scientific Reports, (2025) 15, 818 Q1 - SCIE, IF - 5.8
- 5. Purnima Tummala, Koteswararao Ch Leveraging Text Generation Models for Aspect-Based Sentiment Text Generation, International Journal of Intelligent Engineering and Systems, Vol.17, No.5, 2024, SCOPUS
- BN Jagadesh, NV RajaSekhar Reddy, Pamula Udayaraju, Vijay Kumar Damera, Ramesh Vatambeti, MS Jagadeesh, Ch Koteswararao, Enhanced stock market forecasting using dandelion optimization-driven 3D-CNN-GRU classification, 2024/9/8, Journal Scientific Reports, 14, 1, 20908, Nature Publish-

- Narasimha Rao Yamarthi, Satish Kumar Patnala, Srinivasa Rao Battula, Hari Kiran Jonnadula, Koteswara Rao Ch, Sai Chandana. A Novel IoT-Based Smart and Security System Model for Large Scale Farm Sustainability. Journal of Advances in Information Technology, Vol. 15, No. 3, 2024. SCOPUS
- 8. Purnima, T., Rao, C.K. Automated Detection of Offensive Images and Sarcastic Memes in Social Media Through NLP, International Journal of Advanced Computer Science and Applications, 2024, 15(7), pp. 1415–1425. Q3, SCOPUS/ESCI
- 9. Chandrapati, L.M., Rao, C.K. YOLOv8 in Education: Automated Evaluation of Teacher Presentation Skills, International Journal of Intelligent Engineering and Systems. 2024, 17(6), pp. 152–164, SCOPUS
- Chandrapati, L.M., Rao, C.K. Descriptive Answers Evaluation Using Natural Language Processing Approaches, IEEE Access, 2024, 12, pp. 87333–87347.
   Q1, SCIE, IF - 3.4
- Tummala, P., Rao, C.K. Exploring T5 and RGAN for Enhanced Sarcasm Generation in NLP, IEEE Access, 2024, 12, pp. 88642–88657.
   Q1, SCIE, IF 3.4
- Saikam, J., Ch, K. EESNN: Hybrid Deep Learning Empowered Spatial-Temporal Features for Network Intrusion Detection System, IEEE Access, 2024, 12, pp. 15930–15945. Q1, SCIE, IF - 3.4
- 13. Suresh Babu, K., Vara Prasada Rao, B., Narasimha Rao, Y., **Rao CH**, ...Anil Kumar, Y., Chekka, R.B. A Broad Review on Different Imbalanced Dataset Classification Approaches, International Journal of Intelligent Systems and Applications in Engineering, 2023, 11(4), pp. 27–40. Q4, SCOPUS
- Macherla, H., Kotapati, G., Sunitha, M.T., ... Attuluri, B., Vatambeti, R.
   Koteswararao Ch Deep Learning Framework-Based Chaotic Hunger Games Search Optimization Algorithm for Prediction of Air Quality Index, Ingenierie des Systemes d'Information, 2023, 28(2), pp. 433-441. Q4, SCOPUS
- 15. Purnima, T., Rao, C.K. CROD: Context Aware Role based Offensive Detection using NLP/DL Approaches, International Journal on Recent and Innovation Trends in Computing and Communication, 2023, 11(1), pp. 1–11. Q4, SCOPUS
- Chandrapati, L.M., Rao, C.K. Integrated Assessment of Teaching Efficacy: A Natural Language Processing Approach, International Journal of Advanced Computer Science and Applications, 2023, 14(1), pp. 939–947.
   Q3, SCOPUS

- 17. Rao, C.K., Singh, K., Kumar, A. Oblivious stable sorting protocol and oblivious binary search protocol for secure multi-party computation, Journal of High Speed Networks, 2021, 27(1), pp. 67–82. Q2, ESCI, IF 0.7
- 18. Koteswara Rao, C.H., Singh, K. Securely solving privacy preserving minimum spanning tree algorithms in semi-honest model. International Journal of Ad Hoc and Ubiquitous Computing, 2020, 34(1), pp. 1–10. Q2, SCIE, IF 0.7
- Koteswara Rao CH and Kunwar Singh, Privacy-Preserving Minimum Spanning Tree Algorithms in Static Semi-honest Model in Research Briefs on Information & Communication Technology Evolution (ReBICTE), ISYOU Publishers, Volume 5, Issue 1, Pages 1–10, 2019.
- G. Lakshmi Narayana and CH. Koteswara Rao, A Sensor Network Routing Protocol To Clear The Damage From Vampire Attacks During Packet Forwarding in International Journal of Science Engineering and Advance Technology, Vol 3, Issue 1, ISSN 2321-6905, 2015.
- Alasandguthi Ramya Sree, Ch.Koteswara Rao and D.Anandam, CAM: Double Standard Security Mechanism In The Management Cloud Based Mobile Application in International Journal of Science Engineering and Advance Technology Vol.3, Issue 9, ISSN 2321-6905, 2015.
- 22. B. Srikanth and Ch. Koteswara Rao, Dispensing Definite Frequency Schemes For MIMO Systems in International Journal of Engineering Research & Technology (IJERT) Vol. 1 Issue 8, ISSN: 2278, October 2012.

#### Research Guidance

- JALAIAH SAIKAM (21PHD7157) has defended his thesis with the title "Hybrid Deep Learning and Ensemble Approach for Enhanced Spatial-Temporal and Feature Selection in Network Intrusion Detection Systems" on 27.04.2025. from VIT-AP University, Amaravathi, Vijayawada, A.P. (Awarded)
- TUMMALA PURNIMA (21PHD7093) has defended her viva-voce with the thesis title "NLP-Driven Deep Learning Models for Contextual Content Detection and Generation" on 05.04.2025. from VIT-AP University, Amaravathi, Vijayawada, A.P. (Awarded)
- CHANDRAPATI LALITHA MANASA (21PHD7018) has defended her her thesis with the title "Academic Activity Evaluation Assistant system using NLP and DL approaches" on 15.05.2025. from VIT-AP University, Amaravathi, Vijayawada, A.P. (Awarded)
- YAMARTHY ANIL KUMAR (23PHD7035) has completed his prescribed coursework. (On going).

#### Patents

1. Investigation Title: SYSTEM AND METHOD TO EVALUATE HANDWRITTEN SCRIPTS.

Reference Number: 202341027421 Sponsoring Agency: VIT-AP University,

Publication Date: 26/05/2023,

Status: PUBLISHED

2. Investigation Title: CONTEXT-AWARE OFFENSIVE DETECTION AND

REMOVAL USING DEEP LEARNING TECHNIQUES,

Reference Number: 202341032821 Sponsoring Agency: VIT-AP University,

Publication Date: 23/06/2023,

Status: PUBLISHED

3. Investigation Title: SYSTEM FOR SENTIMENT-AWARE SARCASM GEN-

ERATION,

Application No: 202441001559, Publication Date: 09/02/2024,

Status: PUBLISHED

 ${\it 4. \ \, Investigation Title: SMART SYSTEM AND METHOD FOR ENABLING REAL-}$ 

TIME ASSESSMENT OF CONTENTS IN DOCUMENT,

Application Number: 202441002725, Sponsoring Agency: VIT-AP University,

Publication Date: 09/02/2024,

Status: PUBLISHED.

## Refereed Conference Publications

Academic Conferences Internal Conferences = 11National Conferences = 3

- 1. Saikam, J., Koteswararao, Ch., A Comprehensive Review of Machine Learning and Deep Learning Techniques for Addressing Class Imbalance Issues in Network Intrusion Detection Systems in Proceedings of the 2023 6th International Conference on Recent Trends in Advance Computing, ICRTAC 2023, 2023, pp. 678–683, IEEE SCOPUS Indexed.
- 2. Koteswar Rao CH and Kunwar Singh, "Data oblivious DFS algorithm and Dijkstra's Algorithm" in 6th International Conference on Cyber Security, Privacy in Communication Networks (ICCS) 2020, IIT Patna, Dec. 27 29, 2020.
- 3. Davarapalli Anandam and Ch Koteswara Rao, "Healthcare Provider based on Blockchain and Smart Contract", National Conference on Blockchain and Smart contract Technologies 2019, N.I.T Trichy, 62 68, Nov 8 10, 2019.
- 4. Koteswar Rao CH and Kunwar Singh, "Privacy-Preserving Minimum Spanning Tree Algorithms in Static Semi-honest Model" in **The 3rd International Symposium on Mobile Internet Security**, Cebu, Philippines, August 29 Sept 1, 2018.

## Book Chapters

- Saikam, J., Ch, K. "A Survey of Intrusion Detection Systems Using Machine Learning and Deep Learning Models," International Conference on Algorithms and Computational Theory for Engineering Applications (ICACTEA-2024) in association with Springer book chapter. Aditya Engineering College, Surampalem, Kakinada, India, 2024 accepted.
- Advanced Policy Management for Secure AI Chat BOT-enabled personal health records in cloud-based health care systems. The book chapter has been submitted.

## Workshops or Conferences Attended

- 1.  $20^{th}$  International Conference on Cryptology in India, "Indocrypt-2019" durring  $15^{th}$  to  $18^{th}$  December, 2019 at University of Hyderabad, Telangana.
- 2. Workshop on "Secure Multiparty Computation" during  $27^{th}$  to  $31^{st}$  March, 2017 organized by department of Computer Science and Engineering at Indian Institute of Technology, Bombay.
- 3. 17<sup>th</sup> National Workshop on **Cryptology** (NWC 2017) during 28<sup>th</sup> to 30<sup>th</sup> August, 2017 organized by Department of Computer Science and Engineering at National Institute of Technology, Trichy.
- 4. One week short term course on "Introduction to Cryptography" during 1<sup>st</sup> to 5<sup>th</sup> November, 2017 organized by Department of Computer Science and Engineering at National Institute of Technology, Trichy.
- 5. One week short term course on "Introduction to Algorithms" during 7<sup>th</sup> to 11<sup>th</sup> November, 2017 organized by Department of Computer Science and Engineering at National Institute of Technology, Trichy.
- Participated in the proceedings and presentation of "Indocrypt 2017" held during December 10 - 13, 2017 organized by The Institute of Mathematical Sciences, Chennai - 600113.
- TEQIP-II Sponsored Short term Course on "Introduction of Cryptography" held during January 27 - 31, 2017 organized by Department of Mathematics, Indian Institute of Technology, Kharagpur.
- 8. Attended a workshop on **Server Administration** held in PACE Institute of Technology and Sciences, Ongole, A.P.
- 9. Attended a National Level Conference on **Recent trends in Technology** held in PACE Institute of Technology and Sciences, Ongole, A.P.
- 10. Attended a National Level Conference on **Teaching Methodology** held in Rao & Naidu College of Engineering and Technology, Ongole. A.P.

## Invited Talk and FDP's

- 1. Guest Lecture: Delivered a session on "Blockchain Technology and it's Applications" at CIT, Guntur, on February 10, 2021.
- 2. Expert Talk: Delivered in the One-Week Faculty Development Program on "Mastering on Latex Software" at Chellamalla College of Engineering, held from May 20–21, 2023.
- 3. Guest Lecture: Delivered a guest lecture on "Cryptography and Number Theory" at PACE Institute of Technology and Sciences, Ongole, A.P on March 2024.
- 4. Acted as Judge for the SANKALP2023 symposium held at KHIT, Guntur on November 2023.

#### **Session Chair**

- 1. FIFTH Doctoral Symposium on Commputational Intelligence (An International Conference). 10 11, May 2024.
- 2. An annual international conference (ATHENA) on 'Society, Culture, and Politics: Exploring Northeast India through the Lenses of Social Sciences and Humanities, 5 -7, December, 2023.
- 3. International Conference on Recent Advances and Innovative Statistics with Enhancing Data Science (IC-RAISE DS 2023).
- 4. IEEE International Conference on AI and Signal Processing, AISP'2022.
- International Conference on Advances in Transport Phenomena (ICATP2022 -A Virtual Meet), 16-18 July, 2022.

#### Reviewer

- 1. IET Information Security.
- 2. Journal of Computer Society.

## Professional Membership

- Cryptology Research Society of India, Member Id: L/0888 (Life Member)
- IEEE Member Member ID: 98604877, Hyderabad Section

# Administrative Roles

- 1. 2023 Batch Year Co-ordinator, Department of Networking and Security, SCOPE, VIT-AP University.
- 2. Exam Section co-ordinator, PACE Institute of Technology and Sciences and Technology, Ongole, A.P

## Courses Taught

- 1. Cryptography & Network Security
- 2. Data Structures and Algorithms
- 3. Formal Languages and Automata Theory
- 4. Compiler Design
- 5. Database Management Systems
- 6. Operating Systems
- 7. Design and Analysis of Algorithms

#### Awards & Honors

- 1. Qualified NTA-NET in December 2019.
- 2. Active Participant of Humani Ty Team, NIT Trichy , Tamil Nadu, India. 2016 - 2018.
- 3. Qualified GATE conducted by IIT Madras in 2007.

## Languages

- 1. English
- 2. Hindi
- 3. Telugu

## Personal Information

Date of birth:  $11^{th}$  May 1983

#### Permanent Address:

Dr. Koteswararao Chttipireddy S/o Kannaiah Chittapareddy, Chintalapudi Village, Ponnur Mandal, Cuntur (Dist.) Andhra Pradesh

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