Faculty Profile

Brief Profile (Few Paragraphs)

I am an **Associate Professor** with over 19 years of experience, dedicated to contributing to teaching, curriculum development, and delivery. Throughout my career, I've successfully played a key role in enhancing program outcomes by fostering student engagement and aligning with learning objectives. I am passionate about creating meaningful learning experiences and am driven by the opportunity to continue growing both personally and professionally.

Faculty Photo

In addition to my teaching role, I have taken on leadership responsibilities such as **Department TTO** for the past 6 years, **Experiential Learning Coordinator**, and **CTTO for First-Year Students**. These roles have allowed me to not only contribute to academic advisement but also shape the overall student experience. I am enthusiastic about applying and expanding my skills, always striving to contribute to the continued success and growth of my institution.

Personal Information

Name: [Dr. PRAVEENA T]

• **Designation:** [Associate Professor]

• **Department:** [Computer Science and Engineering]

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• Phone: [9900515950]

Google Scholar: [https://scholar.google.com/citations?user=APHBH9QAAAAJ&hl=en]

ResearchGate: [https://www.researchgate.net/profile/Praveena-Jaikanthan?ev=hdr_xprf]

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ORCID: [https://orcid.org/my-orcid?orcid=0000-0003-1351-7028]

Domain of Expertise

Research Focus

- Primary Area: [Computer Science and Engineering]
- Allied Areas:
 - o [Computer Networks-Wireless Networking]
 - o [Algorithms]

Academic Qualifications

• **Ph.D.**: [Computer & Information Sciences], [VTU], [2022] (Cross Layer resource allocation and scheduling in wireless networks)

- M.Tech: [Computer Science & Engineering], [VTU], [2009]
- B.E.: [Computer Science & Engineering], [VTU], [2002]

Professional Experience

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RVCE	Associate Professor	December 2024 To Till Date
2.	RVCE	Assistant Professor	August 2009 – December 2024
3.	VIT	Lecturer	July 2007 - December 2007
4.	KNSIT	Lecturer	October 2003 - June 2007

Publications & Patents

Journal Publications

- 1. International Journal, Recent Development of Max-SNR Opportunistic Scheduling in Cross Layer Design, in Research Highlights in Mathematics and Computer Science Vol. 7, March 2023, Page 71-88. Q3.
- 2. International Journal, Social-sine cosine algorithm-based cross layer resource allocation in wireless network, International Journal of Electrical and Computer Engineering (IJECE), Vol. 11, No. 1, 02/2021, 2088-8708, Q2.
- 3. International Journal, Implementation of Max-SNR Opportunistic Scheduling in Cross Layer Design, International Journal of Engineering and Advanced Technology (IJEAT), 2249 8958, Volume-9, Issue-1, 10/2019, Scopus Indexed Journal
- 4. International Journal, A Survey on Cross Layer Scheduling and Resource Allocation in Wireless Networks, International Journal of Engineering Trends and Application, 06/2015
- 5. International Journal, The Impact of Industry 4.0 on Supply Chain Management, International Journal of Supply Chain Management (IJSCM), 2050-7399 (Online), 2051-3771 (Print), Vol. 10, No. 4, 08/2021, ExcelingTech Pub, UK
- 6. International Journal, Automated Regression Testing on Network Embedded Systems, International Journal of Scientific Research and Engineering Development, Volume 4, Issue 3, 06/2021, OPEN ACCESS
- 7. International Journal, The Impact of Upcoming Technology on the Insurance Domain, International Journal of Scientific Research and Engineering Development, Volume 4, Issue 3, 06/2021, OPEN ACCESS

8. International Journal, HANDLING FRAUD IN DIGITAL PAYMENTS, High Technology Letters, 1006-6748, 2.7, PEER REVIEW

Conference Papers

- 1. International Conference, Computational Systems and Information Technology for Sustainable Solutions, CSITSS 2023.
- 2. International Conference, Traffic Violation using Distance Estimation and CNN, Grenze International Journal of Engineering and Technology, 06/2022
- 3. International Conference, A Distributed Deep Reinforcement Learning using TensorFlow, 2017 International Conference on Current Trends in Computer, Electrical, Electronics and Communication (CTCEEC)
- 4. International Conference, A novel Scheduling Algorithm emphasizing fairness for Cross Layer Design in wireless networks, 2016 International Conference on Computation System and Information Technology for Sustainable Solutions (CSITSS), Bengaluru, India, IEEE, 210-215
- 5. National Conference, An Optimal Opportunistic Scheduling for Co-operative Multi-Hop Cognitive Radio Networks, National Conference on VLSI, Communication & Computer Networks (VCCN-2), 05/09/2014
- 6. National Conference, A Reward-based MAC layer Scheduling for Co-operative Multi-Hop CRN, National Conference in CSECONF-2014, 06/14/2014
- 7. National Conference, Survey on An Optimal Opportunistic Scheduling For Co-operative Multi-Hop Cognitive Radio Networks
- 8. National Conference, A study of Standard and FIFO queues provided by Amazon Simple Queue Service, National Conference on ICT and Society (WTISD 2017), 05/15/2017

Books/Book Chapters

- 1. Study on Social-sine Cosine Algorithm-based Cross Layer Resource Allocation in Wireless Network, Recent Advances in Mathematical Research and Computer Science, Vol. 1, 10/15/2021, 41-55, 978-93-5547-071-3, 978-93-5547-072-0
- 2. Recent Development of Max-SNR Opportunistic Scheduling in Cross Layer Design, Research Highlights in Mathematics and Computer Science, Vol. 7, 03/2023, 71-88, 978-81-19102-61-7, 978-81-19102-58-7

R & D Grants & Consultancy Projects

Ongoing & Completed Research Projects

- [Project Title] Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].
- [Project Title] Funding Agency: [Name], Duration: [Year-Year], Role: [PI/Co-PI].

Ongoing & Completed Consultancy Projects

1. SAMSUNG PRISM, Visual Display Terminal Syndrome (IOTS61), Prolonged use of display devices (Visual Display Terminals) such as smartphones and computers will have various adverse

effects on users' health. Various symptoms such as eye fatigue, blurred vision, dry eyes, redness, headache, and stiff shoulders are signs of VDT syndrome (Visual Display Terminal Syndrome) or Digital Eye Strain (DES). According to a WHO report, more than 2.2 billion people worldwide have various visual impairments ranging from visual impairment to blindness. Furthermore, by 2050, the number is expected to increase to nearly 5 billion, half of the world's population at that time. It has also been reported that approximately 80% of millennials experience symptoms of eye strain caused by these factors when using display devices. Unfortunately, most users are not aware of this problem, and even among those who are aware, very few are taking appropriate preventive measures. This situation is caused by the discrepancy between the user's perception of eye fatigue and the actual eye fatigue, the user's feeling that they are not yet tired, and a lax perception of eye overuse. Even static method like 15-minute break for every hour of VDT work couldn't fits for all., Certificate of Excellence

- 2. Upcoming new AI Model enablement for onDevice DNN execution (OD55RV), On Device AI Model DNN Execution support, Present day AI models are growing into different new usecase, solving new problems. So current on Device DNN execution need to incorporate the additional model needs to be ready for realizing new usecase on Mobile devices. Eg. Regnet is a new model by facebook, we can check for implementation. Customization involves all the following steps: New Ops: Addition of new ops in cpu, gpu to enable new model execution. New model format: Need to follow the developer and research community and add required model format example, onnx, tflite, pytorch extensions to support plethora of available model format. Ondevice ML specific model: Customization of existing Ops, model format to support new research models., Certificate of Excellence
- 3. PRISM_Worklets_Contextual Slot Tagger (VI90RV), Slot Tagging, Slot Tagging is one of the critical NLP task. It is a very challenging problem to identify the slot values correctly due to various limitations in training a ML model, such as amount of training data. Instead of training all possible Named Entities so as to predict the slot value correctly, it is wise to share the context information to the Slot Tagger model. This will ensure correct recognition of the Slots and boost the accuracy of the tagger model. The same method of sharing the context will be extended for other NLP tasks such as Domain and Intent classification., Certificate of Excellence

Professional Memberships

[IEEE, ACM.]

Awards & Recognitions

- 1. Certificate of Excellence, M/s Samsung Company, SAMSUNG PRISM worklet Visual Display Terminal Syndrome (IOTS61) execution, 06/2021 01/2022, Amazon coupons worth \$900
- 2. Certificate of Excellence, M/s Samsung Company, SAMSUNG PRISM worklet PRISM_Worklets_Contextual Slot Tagger (VI90RV), 06/2021 01/2022, Amazon coupons worth \$900
- 3. Certificate of Excellence, M/s Samsung Company, SAMSUNG PRISM worklet Upcoming new AI Model enablement for on Device DNN execution, 06/2021 01/2022, Amazon coupons worth \$900
- 4. Completed Faculty Development Programme (FDP), Mentoring Educators in Educational Technology (FDP301x), 05/17/2018 06/27/2018

- 5. SAP Award of Excellence, Use of ICT in Education for Online and Blended Learning, 05/02/2016 07/10/2016, 383 out of 4051 participants
- 6. NPTEL 12 weeks course, Computer Networks and Internet Protocol, 07/2018 10/2018

Student Supervision

- Ph.D. Candidates: [nil]
- **M.Tech**: [01]
- Undergraduate Research Mentees: [20]

Professional Roles

- Editorial Board: [Journal Name]
- Chair/Committee Member: [Conference Name, e.g., IEEE International Conference on Robotics]
- Industry Advisor: [Company/Startup Name]

Teaching

Core Courses: |Current semester|

- [CY245AT] [COMPUTER NETWORKS]
- [CS222AI] [Principles of Programming using C]

Advanced/Lab Courses:

• [Network Programming and Security]

Professional Roles

Responsibilities

- Academic: [TTO, CTTO (FIRST YEAR), EL COORDINATOR.]
- Administrative: []