

Raviteja Tirumalapudi

Career Objective

Engaging Engineering Teacher adept at instructing students on the intricacies of mechanical engineering in a structured classroom setting. Especially skilled at clearly explaining fundamental concepts through relevant examples and sound knowledge of classroom materials. Committed to remaining current in the field of engineering.

Education

2019– till now **Doctor of Philosophy**, *Robotics*, Vellore Institute of Technology, Vellore, Vellore. (Not yet awarded. Pre Phd.D Course Work Completed)

2010–2012 **Master of Technology**, *Robotics*, SRM Institute of Science and Technology, Chennai.

Grade : First Class

2006–2010 Bachelor of Technology, Mechanical Engineering, Narasaraopeta Engineering

College, Narasaraopeta.

Grade : First Class

Doctor of Philosophy thesis

title Motion Obstacle avoidance and Path Planning for Autonomous Vehicles Using Optimization Hierarchy System

supervisors Prof. Dr.I.S. Rajay Vedaraj

Experience

Teaching

2019-Till **Teaching cum Research Assistant**, Vellore Institute of Technology, Vellore.

Now Work Description:

- Supported weekly lab sessions, contributing to student engagement, comprehension and learning objectives.
- o Took attendance, graded assignments and maintained student records to assist teachers with administrative tasks and maintain smooth daily operations.
- Handled classroom administration for professors, including taking attendance and recording student progress.
- Performed research into study topics to increase knowledge and ability to provide valuable contributions.
- Write research papers, reports, reviews and summaries regarding Robotics, Data Science and self-driving cars.

- 2016–2019 Associate Professor, Sai tirumala NVR engineering college, Narasaraopet.
 - Work Description
 - Assisted professors and college administrators with continuous development, review, planning and outcomes evaluation to measure Mechanical Engineering program performance.
 - o Applied innovative teaching methods to encourage student learning objectives.
 - Proctored exams and provided remediation for learning improvement goals.
 - o Evaluated student progress through analysis of test scores and homework completion.
- 2013–2016 **Incharge Head of the Department**, *St.Marys's group of institutions, Guntur*, Guntur

Work Description:

- Established research agenda in Mechanical Engineering field to publish in peer-reviewed journals.
- o Built strong rapport with students through class discussions and academic advisement.
- 2012 **Assistant Professor**, *Narasaraopeta Engineering College*, Narasaraopeta.

Work Description:

- Evaluated student progress through analysis of test scores and homework completion..
- Assisted professors and college administrators with continuous development, review, planning and outcomes evaluation to measure Mechanical Engineering program performance.

Publications

- o Raviteja Tirumalapudi, I S Rajay Vedaraj, "An Introduction Of Autonomous Vehicles And A Brief Survey", Journal of Critical Reviews, vol. 7, no. 13, pp. 196-202, Jun. 2020.(scopus)
- o Raviteja Tirumalapudi, I S Rajay Vedaraj, "A New RT Shortest Path Planning Algorithm For Mobile Robot Navigation In Known Terrain", International Journal Of Scientific &. Technology Research, vol. 9, no. 03, pp. 1044-1047, Mar. 2020.(scopus)
- o Raviteja Tirumalapudi, I S Rajay Vedaraj, " Mobile Robots Obstacle Avoidance and Shortest Path Planning Using Algorithms A Review ", Test Engineering & Management, vol. 83, no. 03, pp. 22434-22443, Jun. 2020.(scopus)
- Rajay Vedaraj I.S, Jino.S.Ganesh, Niranjen swarup, Madhan Kumar, Raviteja Tirumalapudi,
 "ARTIFICIAL INTELLIGENCE USING IN VISUAL SLAM METHODS A REVIEW", IJAST, vol.
 29, no. 4s, pp. 3158-3167, Jun. 2020.(scopus)
- o T. Ravi teja and S. Krishna chaitanya, "Autonomous robot motion path planning using shortest path planning algorithms" "International organization of Scientific Research Journal of Engineering (IOSRJEN)", vol.3 Issue 1, Jan-2013, e-2250-3021 ||V1||pp 65-69.
- T. Ravi teja and S. Krishna chaitanya, "Optimize The Heuristic Line Balancing Using Neural network Technique" "International Journal of Engineering Research and Technology(IJERT)", vol.2 Issue 3, Mar-2013, e-2278-0181.
- T. Ravi teja and S. Krishna chaitanya, "Design and Development of Vehicle Accident Detection System Using MEMS Technology", "International Journal of Engineering Research and Technology (IJERT)", vol.2 Issue 8, August -2013, e-2278-0181.
- T. Ravi teja and S. Krishna chaitanya, "Case study on Turbine Blade Internal Cooling", "International Journal of Engineering Research and Technology (IJERT)", vol.2 Issue 3, March -2013, ISSN: 2278-0181
- T. Ravi teja and S. Krishna chaitanya, "Computation of Natural Frequencies of Multi Degree Of Freedom System", "International Journal of Engineering Research and Technology(IJERT)", vol.1 Issue 10, Dec-2012, e-2278-0181.

Conferences

o Tirumalapudi Raviteja, Rajay Vedaraj .I.S, R. Siva Krishnam Raju, M. Yugandhar, "Heuristic Algorithm for Cooperative Motion Planning &. Controlling of Unmanned Surface Vehicles", "International Conference on Robotics, Intelligent Automation and Control Technologies (RIACT 2020)", Vellore Institute of Technology-Chennai.

Workshops &. Faculty Development Programs

- o "Machine Learning &. Artificial Intelligence using Spark" by Prashanth Shantigrama, Co-founder and Director, Golden Value Healthcare Pvt Ltd., Bangalore (02/2020) in VIT, Vellore
- "New Trends on Research and Development" by Ramesh T. Subramaniam, Professor, Malaysia, Malaysia (02/2020) in VIT, Vellore.
- o "Patenting your inventions" by Dr SP Subramanian, Deputy controller of patents, Patent Office , Chennai (01/2020) in VIT, Vellore.
- o "Swarm Intelligence in Engineering Applications" Dr.Suresh Chandra Satapathy, Professor &. Dean Research, School of Computer Engineering, IIT Hyderabad, (12/2019) in VIT, Vellore.
- o "Al and Cognitive Services" Ms. Alagunila Meganathan, Founder &. CTO , Namakkal, Namakkal, (12/2019) in VIT, Vellore.
- o "Artificial Intelligence and Computer Vision using Python based Machine Learning" Mr. Jai Ganesh Suresh, Lead Engineer, HCL Technologies, Chennai ,(12/2019) in VIT, Vellore.
- "Reinforcement Learning (Introduction, Q-Learning, and SARSA algorithm) and hands on session"
 Dr. Akshay Deepak, Faculty, NIT, Bihar, Senior Professor, (12/2019) in VIT, Vellore.
- o "Sentiment Analysis using KNIME: A Machine learning Approach" Prof.S. Chandrasekhar, PhD. (University of Georgia), Senior Professor &. Director, IFIM, Bengaluru (11/2019) in VIT, Vellore.
- "Effectiveness of 5S thinking and its implementation on productivity of Engineering Industry" Mr.
 R. Shravan Kumar, Assistant Manager, BMW, Chennai (11/2019) in VIT, Vellore.
- o "Implementation Practices on Artificial Neural Networks Hands on with Python" Mr. Mithun DJ , Assistant Manager, Indictis Private Ltd, Bengaluru (11/2019) in VIT, Vellore.
- "IOT in CYBERSECURITY" PRASHANTH AC And Priya C Shekar, Technical Experts Cyber Security, SCHNEIDER ELECTRIC, Bangalore (10/2019) in VIT, Vellore.
- "IOT in Industrial Automation" Ajith Chathanath, Product Owner &. Senior Principal, SCHNEI-DER ELECTRIC, Bangalore (10/2019) in VIT, Vellore.
- o "Artificial intelligence Vs Human intelligence: Nurturing Critical Thinking Skills" by Dr. K. Balaji Reddy, Director, Training &. Development, Swarnandhra college of Engineering &. Technology, Narsapuram (10/2019) in VIT, Vellore.
- o "Deep Learning Concepts with Convolutional Neural Network" by Mr. Mithun, Assistant Manager , Indictis Pvt Ltd, Bengaluru (10/2019) in VIT, Vellore.
- "Deep drive into Machine Learning Algorithms for Natural Language Processing" by Mr. Marakkannu
 M, Senior Director Engineering, Kore.ai , Hyderabad (09/2019) in VIT, Vellore.
- o "Autonomous Vehicle Technology" by Mr.Sankar TML, Divisional Manager- R &. D division, Ashok Leyland Limited, Chennai (08/2019) in VIT, Vellore.
- Participated in a one day national level conference Transformation of Engineering Education over Decades- Its Future in Sai tirumala NVR engineering college, NRT.
- Participated in a two day national level workshop on "FINATE ELEMENT ANALYSIS" in NARASARAOPETA ENGINEERING COLLEGE, NRT.
- Participated in a two day national level workshop on "RECENT ADVANCES IN MECHANICAL ENGIEERING" in TIRUMALA ENGINEERING COLLEGE, NRT.

 Participated in poster presentation on Artificial intelligence and Robotics in SRM UNIVERSITY, Chennai.

On-line Courses

Coursera Self-Driving Cars Specialization

Stanford XEE100 - 011 Introduction to Internet of Things

University

IEEE Online Developing and Validating Intelligent Vehicle Control Systems

Training Cooperation in Autonomous Vehicles

(CEU/PDH) Sensors for Autonomous Vehicles

Developing and Validating Intelligent Vehicle Control Systems

Object Visual Detection for Intelligent Vehicles

Memberships

ISTE Indian Society for Technical Education. No - LM 125728

Computer skills

Programming Python, Matlab.

Languages

OS Windows, Linux.

Design AutoCAD, ABB robot studio, Ansys, Car Sim, Carla.

packages

Interests

o Travelling, Reading fiction novels, fish hunting, Cooking.

Languages

English Expert

Telugu Expert

Hindi and intermediate

Tamil

Personal Details

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I hereby declare that the details furnished above are true and correct to the best of my knowledge and belief and I undertake to inform of changed therein, immediately.

Raviteja Tirumalapudi