Faculty Profile

Dr. Sudhir Raj, PhD
Associate Professor

HIGHLIGHTS:

- Number of Journal Publications: 6
- H-Index: 2

PROFESSIONAL LINKS:

- Scopus ID: 57192094189
- Scopus Link: https://www.scopus.com/authid/detail.uri?authorId=57192094189
- Google Scholar ID: 2i3fKSQAAAAJ
- Anna University Faculty ID: 326249
- AICTE Faculty ID: 1-7492978654
- LinkedIn: https://www.linkedin.com/in/sudhir-raj-b89aab11/

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 10
- Industrial Experience: 2

AREA OF SPECIALIZATION:

- Robotics
- Nonlinear Control
- Artificial Intelligence

ACHIEVEMENTS AND AWARDS:

I qualified GATE with all India rank of 374 in Mechanical Engineering

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Sudhir Raj, "Collision Avoidance of Mobile Robot using Successive Convexification", International Conference on Advanced & Global Engineering Challenges, Surampalem, Kakinada, India, 2023
- Sudhir Raj, "Decentralized control for Stabilization of Coupled Pendulums using High gain Observer based Sliding Mode Control", IEEE International Conference on Power Electronics, Control & Automation, Delhi, 2019
- Sudhir Raj, "Reinforcement Learning Based Controller for Stabilization of Double Inverted Pendulum" IEEE First International Conference on Power Electronics, Intelligent Control and Energy Systems, Delhi, 4-6 July 2016.
- Sudhir Raj, "Decoupled Terminal Sliding Mode Control for Stabilization of Double Inverted Pendulum", Conference on Nonlinear Systems and Dynamics, IISER, Kolkata, 16-18 December, 2016.
- Sudhir Raj and Cheruvu Siva Kumar, "Q Learning based Reinforcement Learning approach to bipedal walking control" Proceedings of the iNacoMM 2013 held at IIT Roorkee 19-20, Dec 2013.

OTHER DETAILS (If any):

Springer Book Chapters Published

- Stabilization of Ball Balancing Robots using Hierarchical Sliding Mode Control with State-Dependent Switching Gain

  https://link.springer.com/chapter/10.1007/978-981-99-0236-1_28

- Adaptive Control for Stabilization of Ball and Beam System using H infinity Control

  https://link.springer.com/chapter/10.1007/978-981-99-0236-1_23

- A Neurodynamic Approach to Stabilization of a 10 DOF Biped Mechanism using Reinforcement Learning

  https://link.springer.com/chapter/10.1007/978-981-15-4477-4_34