Returaj Burnwal

Indian Institute of Technology Madras

✉ returaj.burnwal@gmail.com | 🏠 https://returaj.github.io | 🎓 Google Scholar

Education

Indian Institute of Technology Madras   *Chennai, India*
PHD COMPUTER SCIENCE AND ENGINEERING   *2022 - present*
- GPA: 9.4/10
- Advisor: Prof. B. Ravindran, Prof. Nirav P. Bhatt

Indian Institute of Technology Hyderabad   *Hyderabad, India*
BTECH ELECTRICAL ENGINEERING   *2012 - 2016*
- GPA: 9.16 / 10
- Undergrad research advisor: Prof. Soumya Jana

Professional Experience

2023	**Sakura Science Program**, University of Tokyo, Japan
2022-2023	**Student Researcher**, Google Research, India
2021-2022	**Post Baccalaureate**, Indian Institute of Technology Madras, India
2016-2020	**Software Engineer**, Yahoo!Japan, Japan
2015	**Research Intern**, Uurmi Systems, India

Publications

PEER-REVIEWED ARTICLES

OSIL: LEARNING OFFLINE SAFE IMITATION POLICIES WITH SAFETY INFERRED FROM NON-PREFERRED TRAJECTORIES.
   R Burnwal, NP Bhatt, B Ravindran
   Autonomous Agents and Multi-Agent Systems (AAMAS), 2026

SafeMIL: LEARNING OFFLINE SAFE IMITATION POLICY FROM NON-PREFERRED TRAJECTORIES.
   R Burnwal, NP Bhatt, B Ravindran
   Association for the Advancement of Artificial Intelligence (AAAI), 2026

GAN-MPC: TRAINING MODEL PREDICTIVE CONTROLLERS WITH PARAMETERIZED COST FUNCTIONS USING DEMONSTRATIONS FROM NON-IDENTICAL EXPERTS.
   R Burnwal, A Santara, NP Bhatt, B Ravindran, G Aggarwal
   Robotics: Science and Systems (RSS) Workshop, 2023 (Spotlight)

IN REVIEW

Learning from Observation: A Survey of Recent Advances
   R Burnwal, H Mehta, NP Bhatt, B Ravindran, 2025

Presentations

INVITED TALKS & POSTERS

2024. WADHWANI SCHOOL OF DATA SCIENCE AND AI, IIT Madras, India. SafeMIL: Learning Offline Safe Imitation Policy.

2023. AMAZON RESEARCH DAYS, Bangalore, India. GAN-MPC: Learning from Non-Identical Experts.

2023. 3RD RBCDSAI CONFERENCE OF DEPLOYABLE AI, India. GAN-MPC: Learning from Non-Identical Experts.

Awards & Fellowships

2026	**Student Travel Grant**, AAAI
2023	**Teaching Assistance Award**, Department of Computer Science, IIT Madras
2023	**Prime Minister Research Fellowship**, Ministry of Education, India
2016	**3rd in Hackday**, Yahoo! Japan
2014	**Academic Excellence Award**, IIT Hyderabad
2012-2016	**Merit-Cum Mean Scholarship**, (Fully covers academic fees), IIT Hyderabad
2011	**2nd in Regional Mathematical Olympiad**, Jharkhand, India

Mentoring

2025-	**Adithyaa RG**, BTech, IIT Madras
2024-2025	**Hriday Mehta**, BTech, NIT Surathkal →MS, University of Alberta

Teaching Experience

2025-2023	**Reinforcement Learning**, Graduate Teaching Assistant
2022	**Big Data Laboratory**, Graduate Teaching Assistant
2022	**Problem Solving using Computers**, Undergrad Teaching Assistant

Outreach & Other Responsibilities

2014-2015	**Head Coordinator Robotics Club**, IIT Hyderabad