

Carnegie Mellon University

December 2025

Masters of Science in Machine Learning

Current courses: Advanced Introduction to Machine Learning, Intermediate Statistics, Deep Reinforcement Learning and Control

Birla Institute of Technology And Science (BITS), Pilani

July 2022

Bachelors of Engineering, Computer Science and Masters of Science, Economics

WORK EXPERIENCE

Google DeepMind (Previously Google Research)

Aug 2022 - Jun 2024

Pre-Doctoral Researcher in Multi-Agent Systems for Societal Impact (MASSI) Lab

Bangalore, India

Reinforcement Learning and Multi-Agent Systems Research

- Co-formulated novel non-Markovian Time-Series Restless Bandits for optimizing multiple interventions.
- Showcased non-Markovian behavior (which complicated the adoption of prior SoTA Markovian RMAB systems) in the nationwide Kilkari maternal health program with 3.2 million active beneficiaries. [KDD-WS'23]
- Developed the CHAHAK framework leveraging Time-Series Restless Bandits and UCB Monte-Carlo sampling to increase Kilkari's engagement and minimize automated dropouts through strategic intervention allocation.
- Demonstrated the ability for CHAHAK to increase content exposure of the cohort by 57% and preventing dropouts by 33% over a random policy. [AAAI'24]
- Collaboratively devised "Adherence Bandits", a specialized Restless Multi-Armed Bandits (RMABs) subclass dedicated to the engagement challenges of the public health domain. [AAAI-WS'23]

Harvard University

Aug 2021 - Jul 2022

Research Assistant in Kreiman Lab

Boston, MA

Continual Learning (CL) Research

- Investigated interplay between catastrophic forgetting (CF) and OOD generalization ability using 3D modeling.
- Examined adaptability of CL algorithms to continuous domains and demonstrated that models exhibit a saturation point in performance with respect to CF and generalization as the number of tasks increases. [Thesis]

Microsoft

May 2021 - Jul 2021

Software Development Intern in Cloud+Artificial Intelligence team

Hyderabad, India

- Built an End-to-End service providing user insights to the reporting services of the Playwright tool, on track for feature release in six months.

SELECTED PUBLICATIONS

1. **Improving Health Information Access in the World's Largest Maternal Mobile Health Program via Bandit Algorithms.** *Oral Presentation @ The Association for the Advancement of Artificial Intelligence Conference [Track: IAAI](AAAI) 2024.* [AAAI'24]
2. **Analyzing and Predicting Low-Listenership Trends in a Large-Scale Mobile Health Program: A Preliminary Investigation.** *Oral Presentation @ Data Science for Social Good Workshop, KDD 2023.* [KDD-WS'23]
3. **Adherence Bandits.** *Artificial Intelligence for Social Good Workshop, AAAI 2023.* [AAAI-WS'23]
4. **Continual Learning and Out Of Domain Generalization in Continuous Domain Adaptation.** [Thesis]

KEY ACCOMPLISHMENTS AND EXPERIENCE

- Cleared Regional Mathematics Olympiad (RMO); Qualified for Indian National Mathematics Olympiad (INMO)
- Teaching Assistant for three courses: Object Oriented Programming, Database Systems, Econometric Methods
- Volunteer for the Conference on Learning Theory (COLT)

SKILLS

Python, Java, C++, C, Git, SQL, NoSQL, Pytorch, Sklearn, Numpy, Pandas, React