# Prashanth Ravichandar

rprash99@gmail.com | (213) 561-8227 | LinkedIn | Github

### **EDUCATION**

University of Southern California

Master of Science in Computer Science (Honors)

August 2022 – Present 4.0/4.0

Indian Institute of Technology Guwahati

B. Tech in Engineering Physics, Minor in Computer Science and Engineering

9.11/10.00 (Department Rank 1)

## EXPERIENCE

Research Intern

June 2023 - Present

Prof. Gaurav Sukhatme, Robotic Embedded Systems Laboratory

Los Angeles

2016 - 2020

- Worked on learning small and efficient neural network policies for memory-constrained robots.
- Explored parameter prediction for vision-based robot control policies using transformer-based Graph HyperNetworks.

# Senior Technology Associate

August 2020 – July 2022

Morgan Stanley

Mumbai

- · Analysed distributed in-memory caching solutions, with Redis and Apache Ignite, to speed up risk calculations
- Developed .NET Core application using microservices architecture as part of the mortgages team. Adopted domain-driven design to upgrade existing monolithic architecture to microservices-based architecture

Research Intern May – August 2019

Prof. Aditya Gopalan, Dept. of ECE, Indian Institute of Science

Bengaluru

- Investigated the problem of sequential detection of change in the distribution of data with adaptive measurements
- Performed a literature survey along with a preliminary problem formulation, in the context of multi-armed bandits

#### **PROJECTS**

#### Analysis of Surface Names for entities in Wikipedia

July 2019 - June 2020

Prof. Amit Awekar, Dept. of CSE, IIT Guwahati

 $Github\ link$ 

- Analyzed the characteristics of incorrectly mapped links in Wikipedia pages and explored solutions to correct them.
- Created a novel dataset to aid in further research to provide contextual information of errors

# KEY COURSES

Mathematics: Linear Algebra, Advanced Calculus, Graphs and Matrices

Computer Science: Analysis of Algorithms, Computer Systems, Computer Architecture, Software Engineering

Artificial Intelligence: Robot Dynamics and Control, Fundamentals of AI, Machine Learning, Deep Learning, Convolutional

Neural Networks (CS231n Stanford), Reinforcement Learning (David Silver)

Miscellaneous: Game Theory, Computational Physics

#### ACHIEVEMENTS

- Institute Silver Medal: Received the Institute Silver Medal for securing 1st rank in the Department of Physics
- Institute Merit Scholarship: Received a scholarship for best academic performance in the class in the academic year 2018-19
- Inter IIT Tech Meet 2018: Secured Bronze medal in the Star Cluster Identifier event, amongst the 23 IITs participating
- M.P.Birla Institute of Fundamental Research: Graded excellent at the Summer School in Astronomy & Astrophysics, 2014
- Hindustani Talavadya Junior Grade in Tabla 2012: Secured first class
- 21st National Chess Championship 2007: Ranked 158 on the merit list in the Under 9 category

#### TECHNICAL SKILLS

Languages: Python, JavaScript, C/C++, MATLAB, C#, SQL, TypeScript, HTML/CSS, LaTeX

Libraries/Frameworks: PyTorch, Pandas, NumPy, Matplotlib, Flask, Angular

Tools: Docker, Git, Unix/Linux

#### Extracurricular activities

#### Club Secretary, Astronomy Club, IIT Guwahati

April 2018 - 2019

• Supervised the planning, financially and technically, and growth of the club. Led the development of projects including a planetarium, astronomical data analysis, star spectroscopy, space balloon, and radio astronomy

#### Organizer, Techniche, IIT Guwahati

September 2016 - 2017

• Organized the Exhibitions and Industrial Conclave modules of the annual techno-management festival. Interacted with prominent industrialists from Bosch, IBM, and Dell as well as several research groups from USA, Bangladesh and India

#### Volunteer, Sri Sathya Sai Vrinda

 $October\ 2015$  - Present

• Participated in several activities such as serving breakfast to children at government schools, providing COVID relief kits in slums, developing a website to help deliver free educational content, and translating Sanskrit verses from ancient Indian texts