Harish Bommakanti

Education

The University of Texas at Austin

Bachelor of Science in Computer Science

Aug. 2020 - Dec. 2023

GPA: 3.81/4.00

Relevant Coursework: Artificial Intelligence, Robot Learning, Algorithms, Probability/Statistics, Linear Algebra

Skills

Programming Languages: Python, Java, C++, C Developer Tools: Linux, Git, Atlassian Suite, CMake

AI/ML: Scikit-Learn, PyTorch

Experience

UT Austin Research Labs

Jun. 2019 - Present

Volunteer Research Assistant

Austin, TX

- Contributed Python tools to analyze/visualize behavioral metrics in a DARPA project that uses AI to classify
 actors as harmful in simulations.
- Utilized RL algorithms such as PPO in **Python** to provide benchmarks for the Robosuite robotics simulation library.
- Performed hurricane simulations on TACC supercomputers to forecast tidal events such as storm surge.

Samsung Electronics

May 2022 - Jul. 2022

Software Engineer Intern

Austin, TX

- Developed C++/CMake tools to query meaningful diagnostics from mobile phone GPU crash reports.
- Optimized the speed and size of the GPU crash reporting system using Python and C.

Mythic

 $May\ 2021-Aug.\ 2021$

Firmware Engineer Intern

Austin, TX

- Enabled pipelines to expose AI chip statistics such as temperature readings to end-users using Python and C.
- Collaborated with other software and hardware teams frequently to resolve product specification issues.
- Operated under the **Agile Scrum** methodology and completed 200% of the work assigned for the term.

UT Austin Department of Computer Science

Jan. 2021 - May 2021

Undergraduate Teaching Assistant

Austin, TX

- Guided learning in lecture and office hours for 200 students in Introduction to Python.
- Wrote automated grading software in Python to grade student homework submissions.

Projects

Robot Learning Class Projects

Jan. 2021 - May. 2021

• Employed **AI** techniques such as regression and neural networks using **Scikit-learn** and **PyTorch** to perform robotic tasks in simulation such as selectively picking up objects based on color.

Weather Prediction Jun. 2020 – Jul. 2020

- Developed a Python CLI program to generate a 48 hour weather forecast given the past 120 hours of data.
- Applied time series modeling to form a temperature curve that accurately reflects past data.

Robotics Scouting App

Sep. 2019 - Feb. 2020

- Authored a web application to automate data gathering at robotics events using **JavaScript**, **HTML/CSS**, and **Jekyll**.
- Enabled both offline and online data aggregation for 50+ teams per event.