Harish Bommakanti

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U.S. Citizen

Education

The University of Texas at Austin

Bachelor of Science in Computer Science

Aug. 2020 - May 2023

GPA: 3.81/4.00

Relevant Coursework: Machine Learning, Web Development, Algorithms, Data Structures, Operating Systems

Skills

Programming Languages: Python, Java, C++, C

Developer Tools: Linux, Git, GitHub, GitLab, Gerrit, Atlassian Suite, CMake AI/ML: Numpy, Pandas, Scipy, Matplotlib, Scikit-Learn, PyTorch, TensorFlow

Web: HTML, CSS, JavaScript, Bootstrap, Flask, Docker, AWS, SQL

Experience

UT Austin Research Labs

Jun. 2019 - Present

Volunteer Research Assistant

Austin, TX

- Tracked 10+ metrics per actor using **Python** in a DARPA AI project that predicts harmful actors in a crowd.
- Contributed Matplotlib tools to visualize probabilities of harmful actors working as a group, given said metrics.
- Demonstrated the usability of Robosuite robotics simulation by generating Python/TensorFlow benchmarks.
- Achieved 65%+ of performance compared to state-of-the-art industry **RL** methods and simulation benchmarks.

Samsung Electronics

May 2022 – Jul. 2022

Software Engineer Intern

Austin, TX

- Added code to and united 3+ projects using C++/CMake code to query phone GPU diagnostics.
- Established guidelines for testing this new functionality using GoogleTest.
- Optimized speed and size by 10x of the GPU crash reporting system in Linux KMD 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.
- Added 5+ new PCIe features and improved boot flow procedure for use in the customer facing **Python** API.
- 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 grading software in **Python** using unittest and Gradescope's online Docker containers.

Projects

Robot Learning Class Projects

Jan. 2021 – May. 2021

- Employed AI techniques to perform robotic tasks in simulation involving grasping and vision.
- Achieved high accuracies of 80%+ with Regression/Neural Networks using Scikit-Learn and PyTorch.

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 timeseries modeling to form a temperature curve that accurately reflects past data.

Robotics Scouting App

Sep. 2019 – Feb. 2020

- Authored a web app 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.