

Harish Bommakanti

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U.S. Citizen

Education

The University of Texas at Austin Aug. 2020 – May 2023
Bachelor of Science in Computer Science 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

- Extracted 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

- Enhanced and united 3+ projects using **C++/CMake** to easily query mobile phone GPU diagnostics.
- Established guidelines for testing this new functionality using GoogleTest.
- Optimized speed and size of the GPU crash reporting system in Linux KMD by 10x 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**.
- Streamlined the customer facing **Python** API with 5+ new PCIe features and a more robust boot flow.
- 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.
- Authored 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.