HARISH BOMMAKANTI

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EDUCATION

The University of Texas at Austin May 2024
Bachelor of Science, Computer Science Austin, TX

- **GPA:** *3.84*
- **Relevant Coursework:** *Operating Systems, Computer Architecture, Data Structures, Robot Learning, Probability/Statistics, Linear Algebra*

SKILLS

Programming Languages: *Python, Java, C, JavaScript, HTML/CSS, x86-64 Assembly*
Developer Tools: *Git, GitHub, VS Code, IntelliJ IDEA, Jira, Confluence, Perforce, Swarm, Vim, TeX, LaTeX*
Machine Learning Frameworks: *Scikit-learn, PyTorch, TensorBoard*
Web Frameworks: *VuePress, Jekyll*
Languages: *Telugu (Conversational)*

TECHNICAL EXPERIENCE

Mythic Inc. May 2021 - Aug. 2021
Firmware Engineer Intern Austin, TX

- Integrated new features/bug fixes to the customer facing **Python API** and firmware facing **C API,** resulting in a more serviceable AI accelerator chip.
- Collaborated with other software and hardware teams frequently to resolve product specification issues.
- Operated under the **Agile Scrum** methodology and completed 250% 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 as a Teaching Assistant.
- Wrote automated grading software in **Python** to grade student homework submissions.

UT Austin Robot Perception and Learning Lab Oct. 2021 - Jun. 2021
Undergraduate Research Assistant Austin, TX

- Tuned the PPO reinforcement learning algorithm in **Python** to demonstrate the usability of Robosuite, a robotics simulation framework.
- Leveraged data science frameworks such as **TensorBoard**/**Matplotlib** to exhibit robot movement metrics.

NASA Mar. 2018 - Jul. 2018
Software Intern Austin, TX

- Aggregated precipitation data for 100s of Texas locations through National Weather Service REST endpoints with **JavaScript** to host on a Center for Space Research website.
- Automated a 10 minute data visualization process in mapping software to run in under 10 seconds in **Python**.

PROJECTS

Y86-64 System Emulator

- Designed a simulator in **C** capable of executing assembly following Y86-64, a subset of the x86-64 architecture.
- Utilized a pipelined processor and a 2-level cache hierarchy to address realistic time and memory constraints.

Weather Prediction

- Developed a **Python** script 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

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