HECTOR GONZALEZ

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OBJECTIVE: Hardworking, determined software engineer looking to pursue a full-time opportunity.

EDUCATION

The University of Texas at Austin, Austin, TX
Electrical and Computer Engineering – Software Engineering track (05/2023)

Overall GPA: 3.90 / 4.00

Relevant Coursework: Intro to Computing, Intro to Embedded Systems, First Year Design Experience, Software Design and Implementation I and II, Digital Logic Design, Engineering Communication, Software Lab, Algorithms, and Probability.

EXPERIENCE

GAP Inc, Austin, TX, 06/2022 – 08/2022
Software Engineering Intern – Hybrid Cloud Engineering

- Utilized Python to create a numerous number of scripts that automated tasks ranging from verifying TLS certifications, running hot/percona backups on a mongo DB, and constructing CSR keys.
- Conducted necessary maintenance on Linux virtual machines by validating mongo UNIX user passwords.
- Gained a deeper understanding of agile methodologies and various Atlassian technologies (Jira, Confluence, etc.).
- Skills used: Python, MongoDB, GitHub, Agile methodologies, and Scripting.

Applied Research Laboratories, Austin, TX, 06/2021 – Present
Undergraduate Student Technician (09/2021 – 05/2022)

- Utilized Open AI GYM to create custom environments to define our polynomial solving problem.
- Implemented Q-Learning and Deep Q-Learning (SB3) algorithms on our custom environments.
- Presented findings to others on the success and capability of reinforcement learning on solving mathematical concepts given blindness to an environment.
- Skills used: Python, GitLab/GitHub, VIM, and Reinforcement Learning.

Summer Honors Scholar Intern (06/2021 – 09/2021)

- Developed skills in heading a research project and in mentoring others, specifically high school apprentices.
- Nurtured skills in applied research and development by creating an Atlantic Right Whale detection model and a 32-species aquamarine mammal classifier.
- Researched effective methods to defend against adversarial inputs into deep convolutional neural networks.
- Skills used: Python, GitLab/GitHub, VIM, Linux, and Machine Learning

PROJECTS

Hardware-as-a-Service Full Stack Website, Software Lab, 08/2021 – 12/2021

- Collaborated with a team to develop a HaaS website using React, Python, MongoDB, and Heroku.
- Designed and coded the frontend utilizing React JS framework and MaterialUI CSS framework.
- Developed the backend by interfacing with MongoDB and implementing CRUD functionality.

eBuy Final Project, Software Design and Implementation II, 08/2022 – 12/2022

- Created a mock eBay bidding program that utilized multi-threading and an observer design pattern.
- Developed a graphical user interface that displayed items and their respective information using JavaFX.
- Gained familiarity with linking a backend model (Java) with a frontend graphical interface (JavaFX).

SKILLS

Programming Languages: Python, Java, C/C++, HTML, CSS, JavaScript
Technical/Computer Skills: Machine Learning, Reinforcement Learning, Neural Networks, VIM, MongoDB, and Linux.