Nathaniel Valtierra

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EDUCATION

Bachelor of Science in Computer Science   **2019 - 2022**
University of Houston – Houston, Texas
Minor in Mathematics
Overall / Major GPA: 3.8

RELEVANT COURSEWORK

Data Science I	Artificial Intelligence	Software Engineering
Machine Learning I	Systems Programming	Big Data

SKILLS
Programming Languages:
- **Python:** NumPy, Pandas, Scikit-learn, Tensorflow
- **Javascript:** Node, Express, React, p5
- **C/C++:** C99, C11, C++11 – C++20
- **Other:** SQL, Java, C# (Unity engine), R

Tools: Git, Jupyter, Excel, LaTex

HONORS
- Dean's Distinguished Scholar's List, Univesity of Houston
- Academic Excellence Scholarship ($6,500), University of Houston, 2019 – 2022

ACADEMIC PROJECTS:
Full-Stack Web Interface for PostgreSQL Database   **Fall 2021**
- Designed a database using PostgreSQL to manage employees
- Created a web server using Express to query the database and send information to client via a RESTful API
- Designed a web interface using React to view and interact with the database

Reinforcement Learning using Q-Learning and SARSA   **Spring 2021**
- Designed a system for multiple agents find an optimal path in a changing world using reinforment learning, specifically Q-Learning and SARSA
- Created an interactive GUI using TkInter for Python in order to visualize the learned paths and edit the learning parameters
- Used Pandas, Matplotlib, and other Python libraries to analyze the agents' performance