210-557-5285
San Antonio, TX
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Juniper Mills (she/her)

GitHub Link
LinkedIn Link

Education

B.S. Computer Engineering **Aug 2022 - Ongoing**
Texas A&M University, College Station

Significant coursework: Data Structures & Algorithms (CSCE 221), Discrete Mathematics (CSCE 222), Statistics (STAT 211), Differential Equations (MATH 308), and Electricity & Magnetism (PHYS 207)

Experience

Data Science Internship **Jun 2023 - Aug 2023**
Linquest Corporation *San Antonio, TX*

- Worked on data analysis contracts for the United States Air Force and Space Force
- Produced data visualizations using Seaborn, Matplotlib, Plotly, and other visualization software
- Performed data analysis using techniques including clustering analysis, exploratory factor analysis, Markov modeling, and outlier analysis using support vector machines
- Collaborated in the production of presentations, reports, and interactive dashboards for government customers

Projects

Numerical Simulation of Ediacaran Biota **Jan 2022 - May 2022**
Individual Development

Scientific programming in the Python programming language using the PyTorch library for hardware acceleration, using numerical diffusion simulations to investigate nutrient flow in the ecosystems of the Ediacaran seafloor.

The Mouseless Mouse **Feb 2023 - Ongoing**
Large Team Development

Development of sensory and calibration routines (including error correction routines) for a three-dimensional human interface device using sensory processing and integration techniques including Kalman filtering and magnetometer calibration

BMC0 **Nov 2023 - Ongoing**
Individual Development

Speed, torque, position, and trajectory controller for three-phase brushless DC motors developed in C++ on the ESP32 platform using online nonlinear system identification, PID control, and numerical simulations of complex electromagnetic phenomena.

Skills

Programming	Python, Java, C, ,C++, Git, LaTeX, Matlab, MarkDown
Techniques	Unsupervised Machine Learning, Markov Modelling, Data Visualization, Optimization, Control/Estimation Theory, Numerical Methods
Communication	English (native), French (business)
Other	Github, Microsoft Office, Linux