Juniper Mills

Undergraduate Student
Texas A&M University

+1-210-557-5285
jmills05@tamu.edu
GitHub Profile
LinkedIn Profile

Education

•Texas A&M University, College Station *2022-26*
B.S. Computer Engineering Cumulative GPA: 3.467

Projects

•Numerical Simulation of Ediacaran Biota

Numerical diffusion simulations to investigate nutrient flow in the prehistoric seafloor.

- Scientific programming in the Python programming language using the PyTorch library for hardware acceleration.
- Aimed to investigate nutrient flow among specific individuals in the Ediacaran biota.
- Technology Used: Python, PyTorch.

•The Mouseless Mouse

Open source hardware project developing a three-dimensional human interface device.

- Developed sensory and calibration routines (including error correction routines) for a three-dimensional human interface device.
- Project won *Crowd Favorite* in Aggie Coding Club.
- Technology Used: C++, Eigen, ESP32 Platform.

Experience

•Data Science Internship *June - August 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

Technical Skills and Interests

Languages: C/C++, Python, Java, R, SQL, Javascript, HTML/CSS
Libraries and Frameworks: C++ STL, Eigen, Pandas, Numpy, Scipy, Scikit-learn, PyTorch, Matplotlib, Seaborn, Plotly, Dash, Shiny, SQLAlchemy, SpaCy, Mithril.js
Tools: Jupyter Notebooks, RStudio, Jetbrains DataSpell, Visual Studio Code, Git, Github, Tableau
Cloud/Databases: MongoDB, Relational Databases (e.g. MySQL, SQLite)
Relevant Coursework: Python (ENGR 102), Statistics and Error Propagation (ENGR 216), Calculus 1-3 (MATH 151, 152, and 251)
Areas of Interest: Embedded Programming, Data Science, High-Performance Computing
Soft Skills: Self-Learning, Effective Communication, Reliability, Adaptability