JUNIPER MILLS

Computer Engineering Student

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EXPERIENCE

Data Science Internship, Linquest Corporation, Jun—Aug 2023

- Contributed to data analysis and engineering contracts for the United States Air Force and Space Force
- Produced comprehensive and informative data visualizations using Seaborn, Matplotlib, Plotly, and other visualization software
- Constructed data pipelines to formal specifications using SQLAlchemy, Microsoft Excel, Pandas
- 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

Mouseless Mouse, Feb 2023 - Ongoing

- Developed and successfully implemented sensory processing and calibration routines for a complex human interface device
- Led a large team to ship robust process management logic and logging software designed to allow for graceful and simple recovery from unforeseen errors
- Designed and implemented a complex and robust graphical user interface system allowing for user scripting and rapid development with the use of a custom markup language
- Optimized complex software to perform efficiently and robustly on a microcontroller platform with less than 8MiB of RAM
- Co-managed 8 members of the software development team of a large project that successfully shipped a complex product on time and to specifications

BMC0, Nov 2023 - Ongoing

- Developed realtime or faster-than-realtime simulations of permanent-magnet synchronous and brushless
 DC motors using Scipy and other simulation software
- Used online nonlinear system identification and control techniques to develop efficient and effective control algorithms for PMSM and BLDC motors

SKILLS

Programming Languages: Python, C/C++, Javascript, HTML5

Technologies: Git, Matplotlib, Microsoft Office, Pandas, Plotly, Seaborn, SQL, Jupyter

Mathematical: Unsupervised Machine Learning, Markov Modeling, Data Visualization, Optimization, Control/Estimation Theory, Numerical Methods

Communication: English (native), French (business)

EDUCATION

B.S. Computer Engineering, Texas A&M University, 2022 — 2025

Relevant Coursework: Computer Architectures, Data Structures & Algorithms, Discrete Mathematics,
 Differential Equations, Statistics, Technical & Professional Writing