Elanor Finlayson

(404)-599-3083 | efinlayson3@gatech.edu | linkedin.com/in/elanor-finlayson/ | github.com/efin396

EDUCATION

Georgia Institute of Technology — Atlanta, GA
B.S Computer Science; Highest Honors — *Aug. 2020 – Dec 2024*

Georgia Institute of Technology — Atlanta, GA
M.S Computer Science — *Jan. 2025 – Dec 2025*
Extracurriculars: Georgia Tech Cycling Club

EXPERIENCE

Research Assistant — May 2023 – Present
COPE Sensorimotor Lab — *Atlanta, GA*
- Developed pose estimation models to quantify rodent behavior from video data, accelerating analysis of neuro-degenerative condition progression.
- Integrated pose estimation outputs with a robotic arm to replicate rodent walking movements, enabling real-time motion reproduction for experimental modeling and analysis.
- Designed and implemented a neural data pipeline, streamlining the processing of large-scale neural recordings.
- Redesigned the lab website to improve accessibility and SEO, resulting in increased online visibility and user engagement.

Software Engineer Intern — Jun. 2024 – Dec. 2024
NASA Langley Research Center — *Hampton, VA/Remote*
- Refactored and converted infrasound-based localization software from MATLAB to Python, enhancing modularity and runtime efficiency to support future development and research.
- Applied signal processing techniques to analyze infrasound data, enabling real-time localization and supporting future remote sensing and product development.

Data Analyst and Automation Intern — Jun. 2023 – Aug. 2023
Elevance Health — *Atlanta, GA*
- Used Python and SQL to streamline data manipulation and automate reporting processes, improving workflow efficiency and supporting faster, data-driven decision-making across teams.
- Outlined a framework for utilization of an enterprise data lake to increase real-time reporting and reduce manual processing of day-to-day data analysis tasks.

Data Analyst Intern — Jun. 2022 – Aug. 2022
Johns Hopkins Center for Immunization Research — *Baltimore, MD*
- Managed wearable devices for inpatient studies, delivering technical support to ensure uninterrupted data collection and improve study reliability.
- Contributed to the data collection efforts for clinical shigella challenge studies by inputting data into RedCap and Emmes databases

PROJECTS

Touch Cord | *Signal Processing, Python, Group Collaboration, GitHub*
- Designed and implemented signal processing techniques for real-time gesture detection on a cord interface.
- Contributed to the creation of a visual display and evaluated the accuracy of gesture detection in the system.

Board Game | *HTML/CSS, JavaScript, React Framework*
- Developed a virtual board game in React with an AI competitor using a recursive minimax function

On-Board Cycling Drag Sensors and Calculation - Algorithm Development | *Python*
- Analyzed cyclic data variation using Fourier transforms and basics statistics to improve calculation accuracy.

Crowd-Sourced Stock Market Analysis | *Machine Learning, Python, Group Collaboration, GitHub*
- Conducted sentiment analysis on r/wallstreetbets subreddit to optimize model for insights into stock market.

TECHNICAL SKILLS

Languages: Java, JavaScript, Python, Matlab, C/C++, SQL, HTML/CSS
Frameworks/Libraries: FastAPI, React, NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch
Developer Tools: Git, GitHub, Docker, VS Code, Jupyter, Figma, Wordpress
Misc. Skills: Machine Learning, Data Visualization, Predictive Modeling, Signal Processing, Computer Vision