

Abigail Poropatich

aporopa@proton.me • (803) 415-0195

<https://github.com/aporopa> • www.linkedin.com/in/aporopa

OBJECTIVE

Strategy-oriented Physics and Computer Science student with a strong track record of leveraging analytical and problem-solving expertise to inform strategic decisions. Skilled at translating complex technical challenges into clear, actionable solutions, with a passion for enhancing scientific communication and bridging the gap with non-technical audiences.

EDUCATION

Clemson University

August 2020 - December 2024

B.S. Physics & B.S. Computer Science

- Dean's List Academic Achievement Award and ABET Certified

WORK EXPERIENCE

Avionics and Systems Software Engineering Intern

June 2024 - August 2024

Textron Aviation

- Developed UI functionality for flight simulator control panel under US Navy contract, utilizing DevExpress and C#.
- Establishing system requirements and engineering backend logic to connect avionics and monitor simulator activity.
- Lead a team of engineers through aircraft and avionics acceptance testing and hardware integration on RedHat/CentOS.

Lead Computer Science Undergraduate Teaching Assistant

August 2023 - Present

Clemson University

- Delivered lectures on object-oriented principles and C/C++, while supervising two lab sections of 25 students.
- Led a team of five teaching assistants to streamline educational processes and foster a supportive learning environment.

PROJECTS AND RESEARCH EXPERIENCE

Lead Investigator

August 2023 - Present

PTSD Therapy Using Anthropomorphic Language Model

- Deployed a LLM utilizing OpenAI's GPT-3.5, fine-tuned using JSONL scripts and actively managed on Azure.
- Front end development using CSS/HTML with the backend driven by JavaScript via Node.js controlled via GIT

Shipping Systems Integration

August 2023 - December 2023

Software Engineering

- Implemented a shipping API via Postman using JavaScript, AWS, and JSON for mock server documentation.
- Abided by Agile methodologies through active ScrumMaster role while following the software development life cycle.

Undergraduate Researcher

December 2020 - January 2023

Single Molecule Biophysics Laboratory

- Conducted interdisciplinary research utilizing FRET spectroscopy to analyze molecular interactions with Python.
- Led the mathematical modeling of the Förster radius for Calmodulin.

Project Leader

April 2022 - April 2022

ACCElerate Smithsonian

- Led a multi-disciplinary team in the development and deployment of neural-biophysics research.
- Conducted detailed technical presentations and managed interactive displays on plating neural cells at the Smithsonian.

TECHNICAL SKILLS

Microsoft Suite, C, C#, C++, Python, JavaScript, Node.js, Java, HTML, CSS, Azure, GIT, Agile Methodologies, Postman API, AWS, Wireshark, Statistical Analysis, Theoretical and Applied Calculus, Scientific Writing, User Requirements, Analytical Modeling, System Requirements, Technical Presentations, REST API, PyTorch, scikit-learn, Git Bash, FAA procedure