Laura Allison Obermaier

lobermai@stevens.edu | Hoboken, NJ 07030 | (954) 348-8139 | LinkedIn | Portfolio | GitHub

SUMMARY

Master's student in Software Engineering with graduate certificates in Machine Learning and Cybersecurity, and a B.S. in Computer Science. Experienced in full-stack development, teaching, and research assistantships. Built systems that outperformed GPT-4 in evaluations, published research, and engineered secure, scalable apps.

EXPERIENCE

May 2025 - September 2025

NutriverseAI, Remote, US *Full-Stack Developer Intern*

- Contributed 10–15 hours weekly to implementing requirements, fixing bugs, and maintaining documentation
- Collaborated with a 7-person dev team and 1 team lead to develop a cross-platform nutrition app
- Participated in 2–3 weekly meetings focused on CI/CD integration, code reviews, and sprint planning

Stevens Institute of Technology, Hoboken, NJ January 2025 - May 2025

Course Assistant under Dr. Reza Peyrovian

- Delivered timely feedback with detailed comments and responded to emails within 24 hours
- Managed grading for 52 students weekly, ensuring accuracy, fairness, and adherence to deadlines
- Balanced multiple responsibilities (5-20 hours per week with full-time study), excelling in all

Florida State University, Tallahassee, FL

August 2022 - June 2023

January 2024 - December 2025

Research Assistant under Dr. Jonathan Adams

- Conducted prompt optimization using Stable Diffusion and developed a binaural beats mobile application
- Co-authored a research paper analyzing over 723 articles on the <u>"Uses of Artificial Intelligence in Higher</u> <u>Education"</u>, published to the AACE EdMedia+ Innovate Learning 2023 Vienna
- Presented at the Spring 2023 Undergraduate Research Symposium to over 100 scholars, faculty, and parents

EDUCATION

Stevens Institute of Technology, Hoboken, NJ Master of Science, Software Engineering | 4.0 GPA Graduate Certificate, Machine Learning | 4.0 GPA Graduate Certificate, Cyber Security | 3.9 GPA

• Scholarships: Stevens Institute of Technology Graduate Scholarship

Florida State University, Tallahassee, FL

Bachelor of Science, Computer Science | 3.97 GPA

- Achievements: Summa Cum Laude, University Honors Program, 7x Dean's List, and 4x President's List
- Scholarships: FAS Bright Futures, Florida State University Freshman Scholarship

SKILLS

- **Programming Languages:** C++, C#, C, Python, Java, JavaScript, MIPS Assembly, HTML, CSS, Bash, Markdown, LaTeX, MySQL, JSON, XML, SQLite, and Shell Scripting
- Tools & Technologies: Git, Docker, AuthO, Flask, React, Node.js, Nginx, Gunicorn, Jupyter Notebook, Anaconda, Linode, Visual Paradigm, Microsoft Azure, Google CSE, Lynis, .NET MAUI, and Hugging Face Transformers
- Machine Learning: Scikit-learn, Pandas, Matplotlib, SMOTE, ROUGE, BLEU, SpaCy, Mistral-7B GPTQ, AutoGPTQ
- Software Development: Rest APIs, MVVM, Agile Methodologies, Complexity Analysis, and Code Review
- Spoken Languages: English (native), German (native), and French (advanced, 6+ years)

TOP PROJECTS

- NutritionAnalyzer: Implemented a modular NLP pipeline that outperformed GPT-4 in some human evaluations using a parameter-tuned, domain-specialized LLM; showcasing an effective approach to reduce hallucination
- Hacker News: Designed a secure, distributed, auto-updating news platform to streamline tech news access
- Practice Panther: Created a law firm manager app to improve client, project, bill, time, and employee tracking
- Note Taking Mobile App: Developed an Android app to manage and customize personal notes
- FAT32 File System: Built a FAT32 system to aid file management and recursive traversal on mounted volumes

August 2021 - December 2023