# **Joseph Williams**

joseph.williams747@protonmail.com | (251) 888 - 0787 | Auburn, AL | github.com/jwilliams2023 | linkedin.com/in/jwilliams2023

#### **EDUCATION**

Aug. 2023 - Dec. 2025 **Auburn University** 

Bachelor of Science in Computer Science, Minor in Statistics

Auburn, AL

**GPA:** 3.8 / 4.0

Relevant Coursework: Machine Learning, Deep Learning, AI, Data Mining, Probability and Statistics I & II, Data Science with Python, Statistics with R, Database Systems, R Programming, Data Structures & Algorithms (DSA), Linear Algebra I & II

## SKILLS

Languages: Python, SQL, Java, R, JavaScript, C++, HTML/CSS

Software Development Tools: Jupyter, pandas, seaborn, NumPy, PyTorch, TensorFlow, sci-kit learn, Git, Anaconda, Docker Concepts: Machine Learning, Data Pipelines, APIs, OOP, DSA, Data Wrangling, Data Visualization, Statistical Analysis, CI/CD

#### **EXPERIENCE**

May 2025 - Aug. 2025 **Protective Life** Birmingham, AL

Machine Learning/Data Science Intern

Incoming Summer 2025 Intern

#### Auburn University, Dr. Akond Rahman

Undergraduate Research Assistant

Oct. 2024 - May 2025 Auburn, AL

- Demonstrated multiple malicious MITM attacks by exploiting a DNF vulnerability in Ansible utilizing Docker and Python to simulate and intercept traffic for package injection in a controlled Linux environment
- Analyzed 300+ malicious python packages using JSON to annotate reasoning and source for an empirical study

**Carole Fav Jewelers** Sept. 2020 - Aug. 2022

Digital Sales Associate

Mobile, AL

- Enhanced user experience (UX), resolved website functionality bugs, and updated inventory listings using HTML/CSS and JavaScript, leading to a 50% increase in traffic and improved customer interaction
- Managed customer relations and fulfilled sales, leading to an 11% year-over-year growth increase in sales conversion rates

#### **PROJECTS**

Covid Classifier | Python, PyTorch, CUDA, Anaconda, Jupyter, VS Code, Git

- Preprocessed a large Kaggle dataset with 1M+ rows by engineering features, imputing values, and normalizing inputs for model training
- Developed and trained a GPU-accelerated neural network in PyTorch to predict COVID-19 mortality risk from demographic and health data, optimizing with MSE to achieve accuracy of ~88%

**GrubHub Price Match Automation** | *Python, Tesseract OCR, Selenium, PyCharm, Git* 

- Automated website price match submissions using Selenium, achieving a 10x speed increase (from 10 minutes to 1 minute)
- Employed Tesseract OCR machine learning along with Python for Optical Character Recognition text extraction logic

Credit Card Rewards Tracker | React, PostgreSQL, Tailwind CSS, HTML, JavaScript, Node, VS Code, Git

- Developed a full stack React app using Tailwind CSS and DaisyUI visuals for credit card bonus calculation and tracking
- Connected a Supabase PostgreSQL backend and configured automatic CI/CD deployment with GitHub and Netlify

### **LEADERSHIP**

# **Association for Computing Machinery (ACM)**

Aug. 2023 - Present

Technical Advisor

Auburn, AL

- Web Dev Club, Vice President (2025) Lectured and co-led development of club's semester web app
- Competitive Programming Team, Competitor 12th out of 110, ICPC 2024 Southeast Division 2 Regional
- Ethical Hacking Club, Member

# **Engineers Without Borders (EWB)**

Aug. 2023 - Present

Member

Auburn, AL

Volunteered for the annual "Water Cycle" cycling charity race, raising \$40K+ to help design and build water distribution systems for rural Guatemalan mountain villages