# Chloe Crozier

(843) 801-3911 | chloecrozier@gmail.com | linkedin.com/in/chloecrozier | github.com/chloecrozier

#### Education

#### **Clemson University**

Clemson, SC

Jun. '21 - May '25

Bachelor of Science in Computer Science (GPA: 3.85)

- Minors: Mathematics and Economics
- · Awards & Honors: Breakthrough Scholars Program (full-tuition academic scholarship), Clemson University Honors College
- Clubs & Affiliations: CUhackit (Treasurer), Alpha Omega Epsilon (Treasurer), ACM (Treasurer), Honors Peer Mentoring

#### Experience

Deloitte

Washinton, DC

Jun. '24 - Present

- Cloud Engineering GPS Summer Scholar
  - Hold an active, secret-level security clearance to facilitate AWS cloud migration, focusing on the Navy's ETL data pipeline.
  - Collaborate closely with design and strategy teams for requirements analysis, ensuring applications meet client needs and align with wireframe designs.
  - Skills Used: AWS, S3, RDS, Lambda, Postgres, Python, TypeScript

# **Clemson University School of Computing**

Clemson, SC

Undergraduate Teaching Assistant

Aug. '23 – Present

- Host tutoring sessions, hold study-lab office hours, and create academic/professional success resources during the summer semester.
- Instruct, assist, and grade students in introductory courses in object-oriented programming and procedural languages.
- Skills Used: C++, C, Leadership, Communication

# Naval Information Warfare Center (NIWC) Atlantic

Charleston, SC

May. '23 – Jan. '24

Software Engineering Intern

- Held active, secret-level security clearance to conduct pre-deployment testing of Marine Corps software.
- Managed NIWC's Integrated Testing Facility (ITF) virtual machines using ESXi, vSphere, and iDRAC.
- Automated 100% testing for the ITF's core applications using Eggplant Functional and developed documentation for an 85% automation transition for manual testing teams.
- Collaborated with developers on testing procedures, addressed VM memory issues, and maintained two patch baselines.
- Skills Used: Shell Scripting, VMware vCenter, SenseTalk, Linux

#### **Clemson Athletics Analytics Center**

Clemson, SC

Data Analytics Intern

Aug. '23 – May '24

- Processed IPTAY donation data with MySQL to develop retention prediction models and resulting risk categories.
- Integrated Ticketmaster, Fanatics, SalesForce, and Qualtrics API data for cloud-based marketing dashboards.
- Developed an R Shiny app for Clemson Women's Basketball, using Wehoop and linear regression for performance analysis and strategy development.
- Skills Used: Azure DevOps, Tableau, TypeScript, R, MySQL

# **Projects**

# High-Performance Cluster Computing | Spack, Slurm, OpenMPI, Linpack

Jan. '24 – Present

- Assemble a four-node Raspberry Pi mini-cluster to simulate Clemson's TOP500 Palmetto Cluster by configuring the environment using Spack to run OpenMPI applications and Linpack benchmarks (maximum performance of ~3.67 GFLOPs).
- Train and prepare with a team of six undergraduates to compete in SC24's international Student Cluster Competition (SCC).

#### SC Department of Education's Resume Builder | OpenAI API, Llama 3, Hugging Face

Jan. '24 – Present

- Engage in Clemson University's Senior Capstone project with Naval Information Warfare Center (NIWC) Atlantic.
- Define specifications for an NLP application to enhance the SC Department of Education's resume builder tool.
- Design the architecture to implement action word generation, sentiment analysis of identified topics, and skill recommendations based on job description interests.

# **Embedded Systems Parking Sensor** | C++, Eagle, Energia (IDE), Soldering

Jan. '24 – May '24

• Designed circuit boards and implemented source code to build an embedded motion sensor, using an MSB430 Texas Instruments microcontroller, to transmit parking space occupancy information.

#### **PocDoc - Healthcare on Demand** | OpenAI API, MapBox, K-Means Clustering, Linear Regression

Feb. '24

- Submission for Georgia Tech's Hacklytics '24.
- Led a four-member team to build a dashboard that triages mobile health units to patients based on the severity of their condition predicted by an interactive medical-trained language model from Hugging Face and an OpenAPI chatbot.

# Cyber-Physical System Anomaly Detection | Keras, TensorFlow, LSTMs, CUSUM

Aug. '22 – Nov '23

- Analyzed the SWaT dataset, published by iTrust Labs, to design ML models to predict cyber-attacks on the water distribution system.
- Developed four LSTM models (sequential, cascade, single-stage, multi-point) to pinpoint system-wide or sensor-specific attacks.