Cade Agostinelli

https://bit.ly/portfolio-web-cade | 601-985-9549 | cadeagostinelli@gmail.com | www.linkedin.com/in/cade-agostinelli

EDUCATION

Bachelor of Science in Computer Science   **May 2026**

Mississippi State University, Starkville, MS
GPA: 3.8

WORK EXPERIENCE

Hintjen, Starkville, MS   **Jan 2024 – Apr 2024**
Software Engineer Intern
- Collaborated with a team and led the development of over 50% of the backend production code for an event social media app utilizing React, Django, and Node.js, resulting in a user-friendly interface with efficient backend integration
- Containerized applications with Docker to ensure consistent environments, and improved scalability through CI/CD processes, including pull requests and resolving merge conflicts
- Implemented notification and phone verification functionality of the app using Twilio API and developed REST APIs for seamless communication between frontend and backend services
- Developed unit tests for Hintjen's extensive systems and clients, achieving 90% average code coverage
- Improved Hintjen's asynchronous client by developing over 60+ unit tests with Python while collaborating with senior software engineers to conduct code reviews and reimplement the client's infrastructure

Computer Explorers, Jackson, MS   **May 2022 - Aug 2022**
Stem Teacher
- Mentored and trained young minds from the Jackson metropolitan area in essential technical skills
- Helped equip over 100+ students with a solid foundation to excel in STEM fields in the future

TECHNICAL SKILLS

Languages: Python, C++, C, SQL, HTML/CSS, Javascript
Developer Tools: VS Code, IntelliJ, Clion, Git, Linux/Unix, Ubuntu, .NET
Technologies/Frameworks: Docker, Pytorch, NoSQL, REST APIs, Mongodb, Agile, Flask, React, Node.js, Django, Pandas

PROJECTS

FinanceGuru Website | https://github.com/cadeagostinelli/Finance-guru
- Developed a full-stack financial analysis website, leveraging technologies like SQL, Flask, and pandas to analyze and present financial data, emphasizing proper data management
- Utilized Flask and data visualization tools to connect components and organize data

Diabetes Risk Prediction Model | https://github.com/cadeagostinelli/ML_Diabetes
- Built a machine learning model using Python to predict diabetes risk based on clinical and demographic data, improving prediction accuracy to ~75% through feature engineering and optimization.
- Employed libraries such as Scikit-learn and Pandas for data preprocessing, model training, and evaluation, achieving a high accuracy rate.

Generative Adversarial Network (GAN) for X-ray Images| https://github.com/cadeagostinelli/AI_GAN
- Designed and implemented a GAN using Pytorch to generate synthetic X-ray images of pneumothorax
- Optimized generator and discriminator architectures to improve quality of generated images

Drowsy Driving Engineering Design | https://bit.ly/drow-drive-port
- Created a product addressing design specifications and problems culminating in an 80-page portfolio
- Worked on and coded the Arduino portion of project that handled the mechanics in C++
- Collaborated with senior industry engineers for project evaluation and feedback of our full-fledged prototype

RELEVANT ACADEMIC EXPERIENCE

Mississippi State University, Starkville, MS

Coursework | Machine Learning, AI Robotics, Artificial Intelligence, Operating Systems, Algorithms, Systems Programming, Data Structures, Methods & Tools In Software Development, Computer Organization, Intermediate Programming, Linear Algebra