Scott A. Ratchford

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EDUCATION

Bachelor of Science in Computer Science, May 2024

The University of Alabama, Tuscaloosa, AL

Minors: Mathematics, History Honors: Honors College, cum laude

GPA: 3.542/4.000

Master of Business Administration, May 2025 The University of Alabama, Tuscaloosa, AL

WORK EXPERIENCE

Software Developer, May 2023 – present

SmartLam North America, Dothan, AL

- Develop Python-based software to optimize production scheduling
- Conduct analysis to align software with manufacturing needs
- Automate inventory management using Zoho Creator

College of Engineering Technical Support, May 2021 – May 2023

The Cube, University of Alabama Department of Engineering, Tuscaloosa, AL

- Operating 3D printers, scanners, and laser cutters
- Creating 3D models in CAD software, especially SolidWorks
- Managing order queue

3D Design Intern, May 2022 – August 2022

NGE Equipment, Tuscaloosa, AL

- Operating and maintained 3D printers for prototyping
- Programming 3D printers directly with g-code and scripted for Cura
- Developing in Python with Kivy framework

LEADERSHIP

Crimson Smash Club President, April 2021 – January 2022

University of Alabama, Tuscaloosa, AL

COMPUTER SKILLS

Proficient in Python programming language

Web development frameworks: Django, Flask

Machine learning libraries: TensorFlow, Scikit-Learn

Statistics and math libraries: NumPy, Pandas

Desktop development frameworks: PyQt

Created open-source Python libraries, including object-filtering

Experience with C# development using ASP.NET Core and MVC framework

Experience with HTML, CSS, and JavaScript

Experience with JavaScript frameworks, including jQuery

Proficient in version control with Git and GitHub

Proficient in containerization with Docker and Docker Compose

Proficient in database operations using SQL, PostgreSQL, and MySQL

Experience in development in both Linux/Unix and Windows environments

Experience with cloud computing using DigitalOcean Droplets and Microsoft Azure

Experience in CI/CD using GitHub Actions

INNOVATIVE SKILLS

Developed desktop application to automate manufacturing schedules, saving employer over \$20,000 per month in worker productivity

Developed a football analytics website that uses machine learning to predict play calls

Over 9 years of 3D printing experience, including CAD modeling, 3D printer

maintenance, and programming

Developed AI-powered web app to connect Alabama residents to medical services