Scott A. Ratchford

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EDUCATION

Bachelor of Science in Computer Science, May 2024
The University of Alabama, Tuscaloosa, AL
Computer Science **Minors:** Mathematics, History
GPA: 3.542/4.000
Honors College
STEM/MBA Program, May 2025

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
- Managing order queue
- Creating 3D models in CAD software, especially SolidWorks

3D Design Intern, May 2022 – August 2022
NGE Equipment, Tuscaloosa, AL

- Operated and maintained 3D printers for prototyping
- Programmed 3D printers directly with G-code and scripted for Cura
- Coded in Python with Kivy framework

LEADERSHIP

Crimson Smash Club President, April 2021 – January 2022
University of Alabama, Tuscaloosa, AL

- Negotiating sponsorships from companies
- Scheduling weekly and monthly events of 100+ attendees
- Operating social media accounts and advertising events

COMPUTER SKILLS

Proficient in C, C++, and Python programming languages
Proficient in PyQt6 graphical user interface toolkit
Proficient in assembly programming for low-power microcontrollers
Proficient in Zoho Creator
Proficient in Microsoft Windows, Android, and iOS
Proficient in Microsoft Office Suite
Proficient in Adobe Photoshop

INNOVATIVE SKILLS

Over 9 years of 3D printing experience, including CAD modeling, printer maintenance, and direct g-code creation
Education creating Machine Learning models using TensorFlow and Scikit-Learn
Developed desktop application to automate manufacturing schedules, saving employer over $20,000 per month in worker productivity
Developed document conversion application for hiring department, saving employer over $4,000 per month in worker productivity