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: 3.474/4.000
Honors College
STEM/MBA Program, May 2025

WORK EXPERIENCE

Production Automation Engineer, 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 Zoho Creator
Proficient in Microsoft Windows, Android, and iOS
Proficient in Microsoft Office Suite
Proficient in Adobe Photoshop

INNOVATIVE SKILLS

Over 8 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