CALEB C. SIMMONS

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WORK EXPERIENCE

CGTech Inc. — Irvine, CA
Software Support Engineer — September 2023 – Current
- Designed and built various multi-axis machines and robots. Programmed all controller logic and kinematics.
- Wrote and optimized many post processors in Python to calculate and translate machine/robot axis movements.
- Developed and implemented several algorithms that significantly increased and optimized machine movement by 20%.
- Initiated and developed regression tests for post processor development.
- Provided subject matter expertise in composites, manufacturing, and software to hundreds of companies worldwide.

Middle River Aerostructure Systems — Baltimore, MD
Senior Manufacturing and Automation Engineer — June 2021 – June 2023
- Designed, managed, and led the implementation of various multimillion dollar automation solutions for mass manufacturing.
- Initiated the creation of the automation engineering team, leading the implementation of various technologies.
- Developed software to analyze data from all machines. This in turn led to company savings of ~$60,000 a year.
- Designed and implemented a quality inspection robot that now saves the company ~$250,000 a year.
- Led cross-functional teams in sprints using the SCRUM framework, ensuring timely delivery of high-quality products.
- Created and managed project forecasts for labor hours and material costs for all programs.

Boeing Missile and Defense — Huntsville, AL
Lead Manufacturing and Project Engineer — June 2020 – June 2021
- Led a small team of manufacturing engineers to maintain and improve the production of PAC3 missiles.
- Oversaw quality assurance processes to maintain compliance with industry standards and ever-growing requirements.
- Created an automated management system software to optimize the interchanging of various missile components. This sped up our manufacturing of the missiles by ~7% (profit gains are estimated to be ~$22k a year)
- Implemented cost-effective maintenance and repair strategies, optimizing resource utilization, and increasing performance.
- Developed and executed long-term sustainment plans. Provided strategic guidance and leadership to address obsolescence issues, technology upgrades, and evolving threat environments.
- Established relationships with key stakeholders, including government agencies, suppliers, and contractors, to support sustainment efforts and address emerging challenges.

Stark Aerospace — Columbus, MS
Project Engineer — June 2017 – June 2020
- Created shop floor plans, work instructions, and bill of materials for all programs.
- Developed and executed long-term sustainment plans, incorporating lifecycle management principles.
- Implemented continuous improvement initiatives to enhance all processes, reduce downtime, and increase overall manufacturing efficiency.

EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY — Atlanta, GA
Master of Computer Science — Expected May 2025
  Major in Computer Science; Specialized in Machine Learning
  Relevant Coursework: Software Engineering; Operating Systems; Graduate Algorithms

MISSISSIPPI STATE UNIVERSITY — Starkville, MS
Bachelor of Engineering
  Major in Aerospace Engineering; Minor in Math
  Relevant Coursework: Database Systems and Design

ADDITIONAL

Technical Skills: Python, C, C++, JavaScript, SQL, GraphQL, AWS, Snowflake, Git, VERICUT, CATIA, SolidWorks, Jira, Confluence, Monday.com, SAP, Salesforce, Excel, Word, PowerPoint
Languages: Fluent in English; Conversational Proficiency in Spanish
Certifications & Training: Lean Six Sigma, Programming in Python, AWS Certified Cloud Practitioner, JIRA Fundamentals, Apollo Graph Developer