William Osborne

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EDUCATION

Clemson University, Clemson, SC | *Bachelor of Science in Computer Science, May 2025*

TECHNICAL SKILLS

- Languages: Python, C/C++, SQL, Node.js, TypeScript, Dart, Go, Java, HTML/CSS, CUDA
- Frameworks & Tools: React, Electron, Svelte, Django, .NET, Keras, PyTorch, OpenAI/Langchain, Tailwind, Kubernetes, AWS
- Databases: PostgreSQL, MongoDB, MySQL, SQL Server
- Practices: Agile, Scrum, UI/UX Design, REST APIs

EXPERIENCE

Software Engineer Intern | *Tate Metalworks | May 2024 – Aug 2024*

- Designed backend infrastructure using Django ORM and PostgreSQL, reducing bid preparation time by 35% through automated Excel-to-database synchronization.
- Automated multi-tank bid estimation via web interface, decreasing turnaround time from 3 days to 30 minutes, improving customer responsiveness.
- Built an Excel-to-database interface, integrating legacy project workflows into SQL Server.
- Integrated Insightly CRM API, automating customer data population and eliminating redundant data entry.

Network Technician | *Clemson University | Aug 2023 – Present*

- Configured Cisco routers/switches, resolving network outages and reducing downtime across campus.
- Deployed and troubleshot over 100 wireless access points, ensuring 95% coverage campus-wide.
- Collaborated with IT helpdesk team to resolve 200+ connectivity and firewall-related issues, enhancing campus IT reliability.

PROJECTS

Couch Cup – Full-Stack Websocket Application | *www.couchcup.tv*

- Developed a cross-platform, real-time group engagement application using Electron, React, Stripe, Python, WebSockets, and custom neural AI models.
- Implemented AI-driven content moderation and NLP enhancements, enabling real-time user interaction and moderation.
- Synchronized host-client communication, providing seamless user experiences across devices.

Machine Learning Research – Creative Inquiry | *Clemson University Collaboration with Children's Hospital of Philadelphia*

- Developed machine-learning tools leveraging NLP to analyze thousands of unstructured incident reports related to COVID-19.
- Created a discrete optimization method for LLM prompt engineering, significantly improving categorization accuracy of qualitative data.

EXTRACURRICULAR & LEADERSHIP

- Varsity Rowing Team Member (3 Years): Achieved 4 medals in national regattas (ACRA and HOTS); coordinated logistics for a team of 100, managing equipment transportation efficiently.
- Habitat for Humanity Team Leader: Successfully led teams to complete 3 home builds, overseeing electrical installations and structural grading.