

William Osborne

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EDUCATION

Clemson University
B.S. in Computer Science

Graduating May 2025

PROJECTS

- **Large-Language Model Research (Creative Inquiry)**
 - Developing machine-learning tools to analyze unstructured incident report data.
 - Worked with Children's Hospital of Philadelphia in analyzing thousands of records to learn how frontline staff coped with COVID-19 pandemic.
 - Developed tools that used perplexity to guide discrete optimization of prompts for LLM-driven open-ended categorization.
- **Full-Stack Websocket Development** www.couchcup.tv
 - Created Couch Cup, a cross-platform application designed for group engagement.
 - **Technologies:** Electron, React, Stripe for in-app purchases, Python, Webhooks, WebSockets, and AI-driven systems for text-to-image, and custom-trained neural text-to-speech models.
 - **AI Features:** Used natural language processing and generative AI to enhance user experiences and moderate content in real time.
 - **Functionality:** Enabled synchronization between host and mobile clients for a smooth user experience.

SKILLS

- Languages: Python, C/C++, SQL, Node.js/Typescript, Dart, Go, Java, Html/CSS, CUDA
- Frameworks: Keras, Tailwind, Numpy/Pandas, PyTorch, Django, PostgreSQL, MongoDB, MySQL, React, Svelte, OpenAI/Langchain
- Skills: Agile, Scrum, UI/UX Design, Kubernetes, AWS, Power BI, REST APIs, Figma

WORK EXPERIENCE

Tate Metalworks

May 2024 – Aug 2024

Software Engineer Intern

- Designed backend infrastructure using Django ORM and PostgreSQL, reducing bid preparation time by 35% through automated Excel-to-database syncing.
- Automated multi-tank bid estimation process via web interface, slashing turnaround time from 3 days to 30 minutes and syncing RFQs/API files to boost customer offers.
- Designed an interface for reading and writing data from macro-enabled Excel sheets to sync with the active bid database and generate material purchase quotes, reducing time spent by 35%.
- Integrated Insightly CRM API to auto-populate customer data into bid sheets, eliminating manual entry.

Clemson

Aug 2023 – Present

Network Technician

- Configured Cisco routers/switches and resolved network issues, reducing client downtime campus-wide.
- Deployed and troubleshooted 100+ wireless access points to ensure 95% campus coverage.
- Collaborated with helpdesk to resolve 200+ tickets related to connectivity and firewall configurations.

EXTRACURRICULAR & LEADERSHIP

- Varsity Rowing Team (3 years): Secured 4 medals in ACRA and HOTS regattas; managed logistics for equipment transportation (team of 100).
- Habitat for Humanity: Led teams in building 3 homes, including electrical work and structural grading.