William Osborne

wtosbor@clemson.edu | (803) 351-1483 | Greenville, SC | wtosborne03.github.io/portfolio/

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

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

EXPERIENCE
Full Stack Software Engineer | *Decide4Action | May 2025 - Present*
- Streamlined deployment and updates by containerizing applications with Docker and introducing automated testing frameworks.
- Designed and implemented a modular dashboard builder supporting charts, graphs, and forms in a responsive layout, with inter-widget relationships, data linking, and event triggers to enable dynamic, customizable user workflows.
- Refactored legacy 10,000+ line React class components into modern, modular React code.
- Implemented caching and rendering optimizations, improving application performance by 80%.
- Resolved time-sensitive backend issues for major clients, preventing downtime and preserving high-value contracts.

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.

Network Technician | *Clemson University | Aug 2023 – May 2025*
- Configured Cisco routers/switches, resolving network outages and reducing downtime across campus.
- Deployed and troubleshot over 300 wireless access points, ensuring 100% coverage campus-wide.

PROJECTS
Machine Learning Research – Creative Inquiry | *Clemson University and Children's Hospital of Philadelphia*
- Developed machine-learning tools leveraging NLP, analyzing thousands of COVID-19 incident reports.
- Created a discrete optimization method for LLM prompt engineering, significantly improving categorization accuracy of qualitative data.

CUDA FDFT Electromagnetic Solver | *GPGPU Graduate Project*
- Engineered a high-performance electromagnetic field solver in C++ and CUDA, achieving precise simulations of dielectric materials through advanced lossy media correction techniques.
- Optimized computational efficiency, reducing simulation times by 50% while maintaining high fidelity in modeling wave propagation in lossy dielectric media.

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 worked with different teams to complete 3 home builds, constructing tresses, grading for foundations, and tiling roofs.