

Andrew Wilkes

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WORK EXPERIENCE

Radiance Technologies

Jun 2024 – Present

Modeling and Simulation Engineer

Dayton, OH

- Built a full-stack data visualization dashboard using **React, Node.js, and Flask** to audit and compare simulation scenarios, improving analysis efficiency
- Streamlined release processes by automating **GitLab CI/CD** pipelines, enabling repeatable builds and faster, more reliable deployments
- Implemented cross-system communication and control workflows with a **C++** plugin, enabling coordinated execution across systems
- Designed pre-execution validation checks and expanded test coverage, improving system reliability
- Built backend services to transform tracking data between systems, exposing functionality via **APIs** to enable interoperability
- Deployed a containerized web application using Docker, Minikube, Helm, and GitLab CI

Tangram Flex

May 2023 – Aug 2023

Software Engineer Intern

Dayton, OH

- Diagnosed and resolved issues in a C/C++ code transformation tool, improving reliability of automated dependency handling
- Strengthened test coverage by designing lightweight **Bash and Makefile-based** test workflows

Radiance Technologies

May – Aug 2021, May – Aug 2022

Software Engineer Intern

Dayton, OH

- Developed the front end for a modeling and simulation web application, implementing features to surface critical data and documentation
- Documented and showcased custom React components by building a dedicated documentation app modeled after established libraries (e.g., Blueprint.js), improving usability and developer onboarding

PROJECTS

Leftovers | *Python, Flask, HTML/CSS, JavaScript, Elasticsearch, SQLite, Docker* | [GitHub](#)

- Designed and built a full-stack recipe recommendation system using **Flask, Elasticsearch, and SQLite**, enabling efficient search across large datasets based on user input
- Implemented secure authentication and persistent user profiles backed by SQLite, allowing users to save preferences and personalized results

Zelda Game | *C#, MonoGame* | [GitHub](#)

- Recreated a level from *The Legend of Zelda (1987)* in **C#** using **MonoGame** as part of a five-person team
- Built HUD and save/load systems to persist game state across sessions

EDUCATION

The Ohio State University

May 2024

B.S. Computer Science

Columbus, OH

- Specialization in artificial intelligence, including coursework in data mining, information security, and networking

SKILLS

- **Languages:** C++; Python; TypeScript; JavaScript; SQL; Java; C#; HTML/CSS
- **Frameworks:** React; Flask; Node.js; FastAPI; Vite; Electron
- **Tools:** Git; Docker; GitLab CI; Jira; VS Code; Visual Studio; Unity