

Brandon Lacy

contact@brandonlacy.com | +1 531-777-4242

[portfolio](#) | [linkedin](#) | [github](#)

EDUCATION

Master of Science (Thesis) - Software Engineering

University of Nebraska at Omaha

Jan 2022 - May 2024

Omaha, NE

Master of Science (Capstone) - Cyber Security

University of Nebraska at Omaha

Aug 2024 - Present

Omaha, NE

Bachelor of Science - Computer Science

University of Nebraska at Omaha

Aug 2017 - Dec 2021

Omaha, NE

SKILLS

Programming Languages C# | Python | C/C++ | Java | JavaScript | TypeScript | Rust | Kotlin | x86 Assembly

Web Development React | Vue | Angular | Next.js | Svelte | Redux | Node.js | SASS | Tailwind CSS | Blazor/MVC

Cloud Technologies Azure | Function Apps | AWS | CI/CD Pipelines | Docker | Kubernetes | REST API | OAuth2

Databases SQL | PostgreSQL | MongoDB | Redis | SQLite | DynamoDB | Firebase

EXPERIENCE

Kiewit

Full-Stack Software Developer

May 2019 - Current

Omaha, NE

- Engineered and maintained 3 core benchmarking and cost analysis applications. Optimized data visualization using SQL and AG-Grid. Conducted code reviews and implemented best practices for security and maintainability.
- Solo developed an internal web application, streamlining training materials management and automating email reminders; enhanced training efficiency by 30% and saved 50+ hours monthly.
- Lead developer for a React UI library used by all internal Kiewit applications. Collaborated with designers using Figma to create over 50 user-friendly components based on Ant Design, enhancing usability and consistency across applications.
- Mentored numerous junior developers and interns, providing guidance on coding standards, best practices, and career development, fostering a collaborative and growth-oriented environment.
- Led an intern team in integrating AI via TensorFlow into a weld management application, reducing manual processing time by 40% and improving system accuracy by 75%.

University of Nebraska at Omaha

Graduate Researcher - Army Corp of Engineers

Jan 2022 - May 2024

Omaha, NE

- Developed an algorithm to optimize military convoy routes, prioritizing bridge integrity and reducing ambush risks. Achieved a 30% travel time reduction and 40% safety increase through numerous simulations. This research forms the foundation of my Master's thesis in Computer Science while working alongside the Army Corp. of Engineers.
- Created 3 VR games using Unity to aid stroke recovery, plus an app for clinicians to monitor progress. Tested with patients at Immanuel Clinic, showing a 25% improvement in recovery times. Co-authored an extended abstract on the findings.

PROJECTS

brandonlacy.com

March 2024

- Designed and implemented a personal portfolio website to showcase my projects and skills. More projects can be found here.
- Integrated a responsive design to ensure optimal viewing across devices. Deployed via Vercel.

Dynamic Routing Simulation

Jan 2022 - May 2024

- Developed a convoy routing algorithm for the Army Corp. of Engineers leveraging Open Street Maps and National Bridge Inventory datasets to prioritize bridge integrity and minimize ambush risks.
- Formed the foundation of a Master's thesis in Computer Science, contributing to academic research in military logistics and route optimization.

Fantasia AI

Oct 2023 - Current

- Developing a tool designed to assist writers in crafting fiction books by managing characters, plots, and chapters. Currently a personal project and still early in development.
- Implementing features for seamless backlinks between pages, enhancing navigation and coherence when writing the story.
- Integrating AI-powered content generation to provide creative suggestions and help writers develop their narratives.

PUBLICATIONS

- Parker, S., Leutzinger, T., Lacy, B., Ricks, B., Zuniga, J., & Knarr, B. (2020). Use of Virtual Reality for Assessing Gross Hand Dexterity in Young Healthy Individuals [Extended Abstract].