

ISAAC RIDER

210 NW Aspen Street, Lee's Summit, Missouri 64064

573-673-5985

isaac.M.Rider@gmail.com

linkedin.com/in/isaac-rider

github.com/IsaacRider

Personal Website: isaacrider.github.io

Education

University of Missouri

Bachelor of Science in Computer Science — Minor in Mathematics

August 2022 – May 2026

Columbia, Missouri

Experience

Applications Development Intern

University of Missouri – Applications Development Team

May 2025 – Present

Columbia, Missouri

- Independently developed a course management system (TED) using Java and Vaadin Flow 24, with minimal supervision and guidance limited to code reviews.
- Designed and optimized UI components and backend services to improve administrative workflows for faculty and staff.
- Collaborated with senior developers on testing, deployment, and code quality to ensure reliability and maintainability.

Undergraduate Research Assistant

Department of Electrical Engineering and Computer Science

University of Missouri, Columbia, Missouri

June 2024 – Present

- Developing computational models of bladder function by integrating neurophysiological data into simulations.
- Implementing Python algorithms to analyze neural control mechanisms and test model accuracy.
- Collaborating with faculty to refine methodologies and document research findings for future publications.

Lawn Care (Self-Employed)

Lawn Care Provider

May 2018 – Present

Lee's Summit, Missouri

- Delivered professional lawn care services to residential clients, maintaining long-term customer relationships.
- Performed equipment maintenance and repairs, minimizing downtime and improving service efficiency.

Projects

CropAI

Python, APIs, JavaScript, AI

November 2024

- Developed an AI-powered tool that provides farmers with crop care insights using image analysis and environmental data.
- Integrated Google Images, ChatGPT, OpenMETRO, and SoilGrids APIs to deliver tailored, real-time crop health recommendations.

Dungeons and Dragons Game

Java, Eclipse

April 2024

- Engineered an interactive D&D game in Java, applying object-oriented principles for modular and reusable code design.
- Implemented polymorphism and inheritance to enable diverse character classes, abilities, and gameplay flexibility.
- Created a turn-based combat system with extensible logic, allowing for future expansion of mechanics and storylines.

Technical Skills

Languages: Python, Java, C, C++, C#, SQL

Frameworks/Tools: Vaadin Flow 24, Git, GitHub, MySQL, Oracle DB, Eclipse, IntelliJ, VS Code

Platforms/Systems: Linux, Windows

Leadership

Boy Scouts of America

Assistant Scoutmaster/Eagle Scout

August 2018 – Present

Independence, Missouri

- Earned the rank of Eagle Scout, demonstrating leadership, service, and project management.
- Mentored younger scouts through rank advancements and leadership development.
- Organized and led outdoor expeditions, teaching survival, navigation, and teamwork skills.