

JACOB MCGREEN

jmcgreen07@gmail.com | (515) 988-0707 | <https://jacobmcgreen.com/>

EDUCATION

UNIVERSITY OF ROCHESTER

B.S., Computer Science (3.62 GPA, Dean's List)

Rochester, NY

Class of 2026

- *Memberships:* Computer Science Undergraduate Council, DandyHacks Organization Team, Club Baseball
- *Relevant Coursework:* Formal Systems (C, Lisp), Data Structures and Algorithms (Java), Computer Architecture, Artificial Intelligence, and Computer Models. High-level math courses including Discrete Mathematics, Linear Algebra with Differential Equations, and Calculus 1 and 2

EXPERIENCE

Principal Financial Group

Des Moines, IA

Software Engineering Intern

May 2025 – August 2025

- Developed a full end-to-end AI pipeline in 3 days, resulting in annual cost savings of over \$540,000.
- Engineered an AI system to detect conflicts, ambiguity, and outdated information in a critical knowledge base powering an AI agent.
- Implemented RESTful API integrations and contributed to customer-facing frontend enhancements in a Java/Spring/React application.

The Mutual Group

Des Moines, IA/Remote

Applications Development Intern

June 2024 – February 2025

- Worked on a variety of tasks within an agile development team, these tasks included business process automation and development of APIs to streamline internal workflow.
- Redesigned the legal team's software to use current software such as React, Java, and SQL.
- Used Python to do productivity analysis to identify ways that workflow automation could be improved.

RocLab

Rochester, NY

Back End Engineer

February 2024 – February 2025

- Worked on Unicycle, a place where students can sell unwanted items to other students, utilizing Typescript and MongoDB
- Unicycle uses Google-Auth, AWS, and Prisma for the Database

DandyHacks IT Team

Rochester, NY

Full Stack Engineer

January 2024 – February 2024

- Creating DandyHacks 2025 organization page with JavaScript, HTML, and CSS to display hackathon information

PROJECTS AND HACKATHONS

Projects can be found at <http://jacobmcgreen.com>

Connect 4 AI

- Designed and implemented a Connect Four game AI in Python using object-oriented programming. The AI player utilizes the Minimax algorithm with Alpha-Beta Pruning to make strategic decisions during gameplay.

Finnov8 2024

- Formulated a Random Forest model aided by XGBoost tree gradienting to uncover the determinants that signal a company's exit potential.
- Northeast regional competition, achieved 4th place in model accuracy and 4th overall.
- Trained the model on provided datasets for the allotted 24 hours and wrote an investment strategy based on the model.

GymMate+ (DandyHacks 2023 Project)

- In 24 hours, as per the competition guidelines: Designed a webpage for users that are new to fitness using JavaScript, HTML, and CSS.
- Takes user input and biometric information, then outputs workout plans and calorie counts to meet their goal.

SKILLS

- *Programming Languages/Tools:* Python, C, C++, C#, React, Java, JavaScript, TypeScript, HTML, Tailwind, CSS, MongoDB, AWS, Google Auth
- *Other Experience:* Golf Galaxy (Club Fitter) Des Moines Golf and Country Club (Bag Room), Hy-Vee (Cashier)