**JACOB MCGREEN**

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**EDUCATION**

##### UNIVERSITY OF ROCHESTER Rochester, NY

***B.S., Computer Science*** *(3.59 GPA, Deans List)*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 – Present

* 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* Engineered an AI system to detect conflicts, ambiguity, and outdated information in a critical knowledge base powering an AI agent.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 API’s 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 in order 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

**PROJETS 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)*