

Scott Haakenson

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EDUCATION

Michigan State University, College of Engineering

Bachelor of Science, Computer Science

GPA: 4.0/4.0 - Honors College

East Lansing, Michigan

Expected Graduation: May 2026

PROFESSIONAL EXPERIENCE

Rocket Companies, Enterprise Technology

Software Engineering Intern

Detroit, Michigan

May 2025 – August 2025

- Initiated and led the development of an Agile feature for the RHDS, the centralized service for all employee data, by building multiple endpoints in ASP.NET Core, MySQL, AWS RDS, Kubernetes, and Docker
- Built an API that automated client access provisioning, replacing manual SQL updates; reduced change requests from 1.5 engineer-hours to minutes per request, saving ~52 hours annually across the team

Michigan State University, CSE 331 – Data Structures and Algorithms

Undergraduate Learning Assistant

East Lansing, Michigan

January 2024 – May 2025

- Developed a project on Deques with a robust test suite of 68 tests for automated grading in Python
- Evaluated 17 students' projects for time and space complexity, correctness, and adherence to best practices
- Hosted 1:1 help rooms to support students with conceptual questions and project related coding issues

Schaeffler Group North America

Prototype Software Development Co-op

Troy, Michigan

August 2024 – December 2024

- Developed a physics-based plant model to characterize the active ride height suspension in MATLAB
- Authored a rigorous test suite for ride height control software, with 26% of test cases identifying failures

Ford Motor Company, Model E Group

Product Development Intern

Dearborn, Michigan

May 2024 - August 2024

- Applied Hyperparameter Optimization algorithms to a novel Physics-Informed Long-Short-Term-Memory model that predicted high-voltage battery pack temps, improving the model's maximum error from 2.2°C to 1.6°C
- Designed backend scripts for comprehensive data analysis from various high-voltage battery tests in Python

Native Projex, Inc.

Backend Development Intern

Ho Chi Minh City, Vietnam

May 2023 - August 2023

- Enhanced search accuracy from 60% to 80% by automating the processing and categorization of unstructured data to engineer a refined dataset to train a fine-tuned version of Microsoft's DeBERTa machine learning model
- Developed the dynamic sort algorithm as an integral component of a filtering and sorting search framework to provide customers with the best matching locations within major cities in Southeast Asia in Python
- Utilized new vector search techniques and an emerging vector database called Weaviate that enabled the capability to search 100,000+ places

PROJECTS

QuizMe for Amazon Echo, SpartaHack 10

Interactive Media Track Winner; Best AI Learning Tool for Students and Learners Winner

February 2025

- Created an AWS Lambda application to use Quizlet flashcard sets with Amazon Echo devices

SKILLS

Programming Languages: Python, C#, C/C++, Java, SQL, GraphQL, TypeScript, Swift

Technical Proficiencies: Databases (AWS Aurora, RDS, S3), Linux, Figma, Next.js, Tailwind CSS, Docker, .NET, Flyway, RESTAPI, Machine Learning, Git