

Joseph Khalaf

Troy, MI | jznkhalaf@gmail.com | (248) 854-6962 | www.khalaf.net

EDUCATION

Michigan State University – E. Lansing, MI

Bachelor of Science, Computer Science | Minor in Business

GPA: 3.804

May 2025

EXPERIENCE

General Motors

Computer Science Capstone

January 2025 – Current

- Worked with a team of 5 people to improve the waste management system at GM.
- Developing a web dashboard that uses AI and data analysis to detect entry errors and find anomalies in GM's waste management system.

Red Run Golf Club

Golf Operations First Tee Worker

May 2023 – Sep 2024

- Managed golf operations in a dynamic, busy environment which demanded proactivity and good communication to ensure a positive experience for all golf club members.

PROJECTS

SpartaHack 8 – E. Lansing, MI

Jan 2023

- Programmed an AI to detect the location of potholes based on an image of a road using TensorFlow.

MHacks 16 – Ann Arbor, MI

Nov 2023

- Collaborated with a team of 4 people to design and create a program that subtitles and translates a person's speech live and prints the text below their head.

Connect-4 AI – E. Lansing, MI

Sep 2024 – Dec 2024

- Designed and trained AI models to play Connect-4 using Reinforcement Learning, CNN, MLP, SVM, Decision Tree, and Minimax using various python libraries such as SKLearn, PyTorch, and TensorFlow.
- Won 1st place as the best project in my class.

Robofest – Troy, MI

Sep 2018 – May 2022

- Designed and coded Lego Mindstorm robots in C to compete in autonomous tasks and games.
- Helped teach other members learn the basics of coding in C, learning valuable experience in effective planning, communication, team building, and leadership, and project management.
- Placed 3rd at the Worlds Competition.

LEADERSHIP & VOLUNTEER ACTIVITY

- Robofest Programming Lead, Robotics Club – Troy Athens Highschool

Sep 2019 - May 2024

- Member, AI Club – Michigan State University

Sep 2022 - Present

- Member – SJP MSU – Michigan State University

Sep 2024 – Present

TECHNICAL SKILLS

Python, C++, C, JavaScript, Java, Unix, Git, HTML, CSS, Android Studio, MySQL, SKLearn, PyTorch, TensorFlow, ARM Assembly, MongoDB, Docker, Microsoft Office Suite