# Nicholas Maggi

(248) 600-7782 • nicholasmaggi18@gmail.com • thekfb.github.io

#### **EDUCATION**

## University of Michigan, Ann Arbor

August 2020-December 2023

BSE in Computer Science

GPA: 3.76

Coursework: Web Systems, Database Management, Data Structures and Algorithms, Agent Based Modeling, Computer Vision, Networking, Autonomous Robotics

#### **PROJECTS**

## **Instagram Clone Project**

January 2023-February 2023

Class Project

Created a clone of Instagram including posts, comments, accounts, and likes with a team by implementing a REST API on python backend, database querying with sqlite3, client-side dynamic web pages with React, and deploying to AWS

## **Path Updating Line Bot**

October-December 2023

Final Design Project

Used OpenCV in C++ to detect lanes an obstacles as part of a team to design and build a robot to autonomously follow lanes and avoid obstacles with partially obscured lane markings

## **Minesweeper 3D Personal Project**

June 2022-August 2022

Personal Project

Self-taught Unreal Engine 4 to implement a 3D version of the classic game *Minesweeper* in *C++* 

# **TEAMS**

## **University of Michigan Autonomous Robotics Club**

August 2020-April 2021

Member - Sensors Subteam

Used the Robot Operating System and LIDAR to construct a miniature autonomous platform to build a map and navigate its surroundings independently

# FIRST Robotics Team #3098 & #8068

January 2017-April 2020

Programming Lead, Founder & Vice President

Developed Java code for controlled and autonomous robot function using vision processing, motion profiling, PID control, and other techniques resulting in a 90%+ success rate

#### **WORK**

## **University of Michigan School of Public Health**

August 2020-December 2020

Media Assistant

Assisted professors with hybrid (virtual and in-person) instruction, troubleshooting technical issues live to minimize difficulties with new instruction formats

### **Zap Zone Amusement Center**

June 2019-August 2020

Attraction Attendant

Oversaw multiple areas of the store, running attractions and responding to customer questions and complaints while maintaining equipment to reduce downtimes