# ZACK JOYCE

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# **BACKGROUND**

Computer Science graduate from Michigan State University specializing in machine learning, full stack development, and 3D development engines seeking a challenging position that permits me to learn and grow my skill set.

#### **EDUCATION**

Michigan State University, Bachelor of Science, Major: Computer Science | Cognate: Business, 2023

• GPA 3.615.

#### **SKILLS**

- Proficient with programming languages C++, C#, and Python.
- Intermediate experience with Java, JavaScript, Swift, HTML, and SQL.
- Extensive experience using Unity 3D, Xcode, Apache Tomcat, Oracle, Spring Boot, Firebase, and various ML libraries.
- Credits in Databases, Networks, Machine Learning, Biometrics, and Software Engineering.
- Strong experience in graphic design and UI.

#### **WORK EXPERIENCE**

Ausuma Development Solutions, Remote June 2022 - August 2022 Engineering Internship.

- Worked with a development team in web design, bug testing, and full stack development for an ERP system.
- Attended and participated in daily meetings with the engineering department and assisted in frontend development.

Eagle Eye Golf Course, East Lansing, MI. May 2021 - August 2021 Grounds Crew.

• Worked 6AM - 2PM, 6 days a week, in lawn maintenance, greens management and other needed tasks for Eagle Eye golf course.

Roto North America, Chester, CT. October 2018 - January 2019 Engineering Internship.

- Worked on Patent searches, differentiating patents for relevance based on exact measurements of products and tolerances, along with organizing the results of these searches and reporting to management.
- Shadowed product research and manufacturing.

**Technical Edge IP Service**, Remote May 2018 - September 2018 Engineering Research Intern.

- Assisted IP attorney in reviewing patent analysis in medical device arts.
- Talked with medical device engineers regarding new inventions and developments.

#### **PROJECTS** (Available on Github)

### Daily Drive iPhone App

- Developed iOS app "Daily Drive" using Unity 3D, Firebase Google Services, and Xcode.
- Received official sponsorship from local businesses including MAC Legends driving range.
- Features database capabilities to provide SMS 2 factor authentication, push notifications, and real-time database queries.

# Lane Management System

- Tasked to create a high assurance system to provide functionality for a lane keeping system on a vehicle.
- Includes SRS document, use-case diagram, domain model, sequence diagrams, state diagrams, and prototype created using Unity 3D.

## Public Bet Handle vs NFL Game Outcome Neural Network + Logistic Regression Model

- Collects data from "Lines and Scores" section of vsin.com.
- Features collected for each team weeks 1-18 of the NFL regular season and trained on the outcome of each matchup.

## **Union Pacific Switch Alignment Mobile Game**

- Worked with a team to develop a mobile game using Unity 3D for Union Pacific to train employees in switch alignment.
- Used Spring Boot to create a REST API, along with Apache Tomcat web server and Oracle Cloud Database Services.