

# Sang Hyun Shim

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## Education

**University of Michigan, College of Engineering**

**BSE Computer Science**

GPA: 3.93/4.00

University Honors, Dean's List, William J. Branstrom Freshman Prize - Awarded to the top five percent of freshmen within their college

**Coursework:** Machine Learning, User Interface Development, Data Structures and Algorithms, Discrete Math, Foundations of Computer Science, Computer Organization, Programming and Introductory Data Structures

**Ann Arbor, MI**

*April 2023*

## Job Experience

**Ford Credit**

**Dearborn, MI**

**Software Engineering Intern**

*June 2021 – August 2021*

- Implemented and monitored multiple APIs to manage and distribute Ford Credit's database, granting agents and other Ford teams permission to directly access the data without submitting a request
- Incorporated an automated security check on the APIs to discover vulnerabilities within the code after each edit
- Uploaded the APIs onto APIC to give agents and other Ford teams access to the latest versions of the APIs
- Utilized test driven development (TDD) for error handling and concise, code development which improved the readability of the code for other software engineers to understand
- Utilized agile delivery practices to track the team's efficiency, allowing the team to reflect and make improvements on how to divide the work more efficiently to accelerate project deployment

**Ascension Providence Hospital**

**Novi, MI**

**Volunteer/Leader**

*June 2018 – August 2018*

- Coordinated organizational duties with the team at the outpatient center to provide service to an average of 15 patients a day, resulting in the maintenance of sanitary working conditions for the healthcare practitioners
- Monitored the supplies of vials and transportation of blood work within the lab for the doctors' convenience, leading to a faster retrieval of the needed items for efficient patient care

## Project Experience

**Project - Forum Classifier**

- Trained a program to classify new posts without related labels given old posts that had labels in C++
- Incorporated binary search trees, recursion, and ordered maps to organize and sort posts into the appropriate topic
- Obtained an accuracy of 87% in assigning the correct label for each post

**Project - Database**

- Implemented a database that allows users to efficiently organize, search, and edit large sets of data in C++
- Incorporated unordered maps and ordered maps to quickly store data and access memory
- Implemented a "Generate Index" feature, granting the user fast access to data insertion, deletion, and display via ordered and unordered maps

## Skills & Accomplishments

**Skills**

**Technical:** C++, C, Python, Java

**Soft:** Customer service, problem-solving, project management, interpersonal communication, team leadership

**Awards**

All Academic America: *Maintained at least a 3.30 GPA and competed in at least 50 competitions in multiple years*

All-State Band for high school: *Top 100 musicians in Michigan chosen to be part of this program*