

# Suraj Harjani

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**May 2021** GPA: 3.5/4.0

#### **EDUCATION**

# University of Michigan, Ann Arbor

B.S.E. Computer Science Engineering (Dean's List)

#### **Relevant Courses**

- Data Structures & Algorithms I and II Computer Science Pragmatics Computer Organization Linear Algebra
- Software Engineering Computer Science Fundamentals (Coursera) Applications of Machine Learning in Python

#### **SKILLS**

#### **Programming Languages**

Experienced: C++, C, ARM, Python, JavaScript, C# • Learning: MySQL, MATLAB, PHP

#### **Known Tools**

• Experienced: Git, JSON, Unity, bash, UNIX based Systems, Google Cloud, Vim, Virtual Machine, Chrome extension API, Various testing frameworks

## **PROJECT EXPERIENCES**

## Client and Server-side LAN messenger system (Python)

- Utilized socket API to create a server/client information exchange protocol that utilizes IPV4 format to transfer strings of messages between clients through a server protocol script running on any one of connected machines.
- Utilized as a tool to communicate running information between parent and forked processes.

## **Head Soccer (Unity using C#)**

- Utilized physics engine built into Unity and complex algorithms to build a timed, multiplayer, platform soccer game with score-tracking capabilities
- Plans are in place to continue on the initial project to provide a smoother interface with bot, arcade and other modes

## LC-2K Computer Architecture assembler and simulator (C)

- Understood and mirrored working of single-cycle and pipeline data path versions of the LC-2K microarchitectures in C to further understand how the data and control paths function
- Implemented with multiple versions and microarchitectures to study the CPI and latency of varying microarchitecture components.

# **EXPERIENCE**

## Management Consultant (BOND Consulting Group)

January 2019 - Present

- Analyzed and modeled data in order to find trends and enhance services schedule which better mirrored demand in order to improve client's revenue and ease overloaded hours.
- Examined appointments and demographics to strategize promotion and organization of client's underperforming store to improve customer retention and spread reach within target market and improve overall utilization
- Contacted 6 local businesses/organizations a semester to gauge interests and find clients with whom a project would challenge consultants to learn and apply new skills in a real world setting.
- Liaised with past clients to receive detailed reports in order to track driven impact and improve existing processes to ensure maximum positive impact.

## Resident Advisor (University of Michigan Housing)

September 2019 - Present

- Facilitated inclusive environment for 50 residents, being a mentor for concerns and support.
- Organized monthly programming around building community and resident well-being in order to promote inclusivity

## **Computer Consultant (CAEN Computer Network)**

March 2019 - May 2019

- Ensured quick resolution of client concerns by providing troubleshooting of CAEN software and services, hence promoting an environment conducive to engineering research and learning and ease-of-use for all users.
- Served as the forefront face of CAEN, having significant technical understanding of the hundreds of CAEN services and software as well as the access and skills needed to troubleshoot or solve previously unknown issues.