

EDUCATION

University of Michigan, Ann Arbor - College of Engineering

(Sep 2017 - May 2021)

- **Major -** Computer Science And Engineering
- **GPA -** 3.5
- **Courses -** Machine Learning, Programming Languages, Operating Systems, Web Systems
Discrete Math, Linear Algebra, Statistics & Probability

EXPERIENCE

GyanSys Inc. - Software Engineering Intern

(Jun 2019 - Aug 2019)

- Developed SAPUI5 Web Applications on the SAP Cloud Platform
- Published a Fiori Mobile Application on the SAP App Store with features such as Platform Independence, Cordova, Kapsel plugins, S4D data service integration and a chatbot built on Microsoft Azure.

Indian Institute Of Technology, Delhi - Research Intern

(Jul 2018 - Aug 2018)

- Researched on Peer to Peer Energy Distribution between Electric Vehicles while Maximizing Social Welfare.
- Implemented an Iterative Double Auction mechanism in Python.

Blockchain at Michigan - Co-Founder and Former Head, Research and Development

(Feb 2018 - Dec 2018)

- Building Michigan leaders in the Blockchain Space. Responsible for research and development initiatives.
- Conducted workshops, taught basics of Ethereum and solidity to students and held training intensive lectures.

RESEARCH

Future of Programming Lab – Hazel Project

(Dec 2019 - Present)

- FP Lab at the University of Michigan designs next-generation user interfaces for next-generation programming languages
- Hazel - live functional programming environment that is able to understand, manipulate, and even run incomplete programs, i.e. programs with holes.

Free Speech Technology - Development team, Multidisciplinary Design Program

(Sep 2018 - April 2019)

- Developed Android/iOS microblogging applications.
- Direct and transitive phone-to-phone communication resistant to outages, blocking, censorship, and surveillance.

PROJECTS

Network File Server

(Nov 2019 - Dec 2019)

- Implemented a *multi-threaded, secure* network file server.
- Used sockets, client-server systems and security protocols.

Memory Manager

(Oct 2019 - Nov 2019)

- Implemented a *pager* - part of the kernel that manages application processes' virtual address spaces.
- Utilized page tables, copy-on-write, "FIFO with second-chance" algorithm etc.

Instagram Clone

(Jan 2019 - Feb 2019)

- Implemented an Instagram clone with server-side and client-side dynamic pages.
- Client Application makes AJAX calls to the REST API.
- Deployed on AWS and ran on NGINX server (server deployment through GUNICORN).

Wikipedia Search Engine

(Mar 2019 - Apr 2019)

- Built a scalable search engine that is similar to a commercial search engine.
- Information retrieval based on both tf-idf and PageRank scores.

SKILLS

Languages - C, C++, Python, Java, OCaml, ReasonML, HTML, CSS, JavaScript, Android Java

Libraries - Flask, ReactJS, SAPUI5, NumPy, Matplotlib, SciPy, Hadoop MapReduce

Technologies - Xcode, Visual Studio, NetBeans, IntelliJ IDEA, Dune, SAP Cloud platform, Bash Scripting, SQL, Git, MongoDB

Certification - M001-MongoDB Basics (MongoDB University)