# SIDHARTH SUDARSAN

# sidharth.me

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#### **PROFILE**

An aspiring software engineer, a camera enthusiast and a thinker channeling his passion into making a difference. Avid learner and a fan of software fundamentals who focuses on clean design. Inherently curious student who grasps new skills and concepts quickly. Fluent in English, Malayalam and Hindi.

#### **EXPERIENCE**

# • Augmented Urban Space Modeling Lab

RESEARCH ASSISTANT — YORK UNIVERSITY April 2020 — present

Carrying out research on a module of the **ISSUM** project under Dr. Gunho Sohn. Developed an MVP for an AR-based indoor navigation and visual cognition assistant for the visually impaired — HoloAssist. Built on Microsoft HoloLens using the Mixed Reality Toolkit and the Unity game engine, 3D models and spatial scans of the campus environment were utilized. Currently developing a crowd simulator for the YorkU campus for research on pedestrian comfort analysis and effective social distancing protocols.

#### • Dr Car

BACK-END DEVELOPER

August 2020 - March 2021

Worked on a startup with a team of six, reinventing how car owners book, service, and track their car repairs, driven by a deep rooted desire to address the hassle associated with car care and servicing. Designing, building and deploying the back-end server for the product. Building a Node.js GraphQL API using Apollo and Express as the server and MongoDB as our NoSQL data layer.

### **EDUCATION**

# • B. Eng. Software Engineering

LASSONDE SCHOOL OF ENGINEERING — York University 2018 — present

# • Startup Entrepreneurship

TECHNION — Israel Institute of Technology May 2019

# RELEVANT COURSEWORK

Advanced Object Oriented Programming — Java

Computer Architecture — Verilog, RISC V

Software Tools Embedded Systems — bash, C

Fundamentals of Data Structures

Logic for Computer Science

Software Design

Operating System Fundamentals — C

System Specification & Refinement — Event-B

Applied Multivariate Vector Calculus

Professional Engineering Practice

#### **SKILLS**

### • Computer Languages

Bash, C, C, Java, JavaScript, HTML, CSS, Python

### Technologies

Node.js, GraphQL, MongoDB, Vue.js, Git, CI/CD, Firebase, Unity, Jest, LATEX

### • Design, Photo & Film

Adobe | Photoshop, Lightroom, Premiere Pro

# **PROJECTS**

#### • Aawaaz Portal

Vue.js, Firebase

Built a minimal learning management system with a team of three people for a private tutoring company based in India. The system has essential features like assignment portal, grades management, file sharing and chat for ease of communication between students, teachers and admins of the institute. The system was built on Vue.js with a Firebase back-end.

## • https://sidharth.me

Personal Server

Configured Nginx as a web server. Secured server with GPG key-based login, UFW firewall configuration and fail2ban brute-force blocker. Configured a mail server with Postfix, Dovecot, SpamAssassin and OpenDKIM. Self-hosted Bitwarden password manager and Wireguard VPN server in containers. Deploy and run a Tor middle relay to donate bandwidth to the Tor network.

# VennEver

Java, CI

Developed a Java desktop application with a team of four for coursework. The application allows the user to create and customize Venn diagrams to visually represent various types of data sets. The software is developed using the Java GUI library JavaFX, Git, build tool Gradle and CircleCI for continuous integration. Application is unit and function tested with JUnit.

#### VOLUNTEER

# • Lassonde Student Government

VICE PRESIDENT OF MEDIA April 2019 — March 2020

Student council for Lassonde School of Engineering.

#### • ElleHacks 2019

VICE PRESIDENT OF MEDIA

December 2018 — March 2019

Canada's largest all-female student-run hackathon.

### **INTERESTS**











Photo/Film

Football

Problem Solving

Open Source

Linux