SIDHARTH SUDARSAN

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PROFILE

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

EXPERIENCE

• **AUSM Lab** | *May* 2020 — *April* 2021

RESEARCH ASSISTANT — YORK UNIVERSITY

Carrying out research under Dr. Gunho Sohn. Developed an MVP for an AR-based indoor navigation and visual cognition assistant for the visually impaired. Built on Microsoft HoloLens, 3D models and spatial scans of the YorkU campus were utilized. Developed a crowd simulator for the YorkU campus for research on pedestrian comfort analysis and effective social distancing protocols.

• **Dr Car** | August 2020 — March 2021

BACK-END DEVELOPER

Worked on a startup with a team of six, reinventing how car owners book, service, and track their car repairs. Designing, building and deploying the back-end server for the product. Built a Node.js GraphQL API using Apollo and Express as the server and MongoDB as our NoSQL data layer.

• Qii AI | May 2021 — present

AUGMENTED REALITY DEVELOPMENT INTERN

Developing an AR-based remote industrial inspection application to support Qii AI's software-based drone inspection workflow. Leveraging *Azure Remote Rendering* on HoloLens to render high quality 3D assets from the Qii AI platform.

EDUCATION

- **B. Eng. Software Engineering** | 2018 present LASSONDE SCHOOL OF ENGINEERING — York University
- **Startup Entrepreneurship** | *May 2019* TECHNION — *Israel Institute of Technology*

RELEVANT COURSEWORK

Advanced Object Oriented Programming — Java

Fundamentals of Data Structures

Design and Analysis of Algorithms

Computer Network Protocols and Applications

Computer Architecture — Verilog, RISC V

Operating System Fundamentals — C

Software Design

Introduction to Computer Security

Digital Logic Design

System Specification & Refinement — Event-B

Software Engineering Testing

SKILLS

• Computer Languages

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

• Technologies

Git, Node.js, GraphQL, MongoDB, Vue.js, CI/CD, Azure, 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 Administration

Configure and manage Nginx as a web server. Secured server with GPG key-based login, UFW firewall configuration and fail2ban brute-force blocker. Configure and manage 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 | April 2019 — March 2020
VICE PRESIDENT OF MEDIA
Student council for Lassonde School of Engineering.

• ElleHacks 2019 | December 2018 — March 2019 LEAD ORGANIZER

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

INTERESTS











Cars

Photo/Film

Problem Solving

Free Software

Linux