SIDHARTH SUDARSAN

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PROFILE

Software Engineer with 2+ years of experience, seeking full-time roles focusing on Cloud Infrastructure, DevOps, SRE, Networking and Security.

EDUCATION

• B. Eng. Spec. Hons. Software Engineering | LASSONDE SCHOOL OF ENGINEERING — York University Security Stream

2018 - 2023

Relevant Coursework: DS&A, Advanced OOP, OS, Computer Architecture, Software Design, Networking, Security, Cryptography **Activities:** VP at Lassonde Student Council, Lead Organizer for ElleHacks hackathon, Organizer for Hult Prize Regionals

• **Startup Entrepreneurship** | Technion — *Israel Institute of Technology*

May 2019

A four-week experiential learning program focused on building entrepreneurial and self-discovery skills at Technion, visiting startups, incubators and founders across Israel. Developed and pitched a startup plan to venture capitalists which won an award.

EXPERIENCE

• Qii.AI | CLOUD ENGINEER

May 2022 — present

Design and implement a multi-cloud architecture for compute/GPU workloads, databases, storage, caching and networking. Carried out cloud migration of all the company services and switched to production. Set up auto-scalable infrastructure optimizing for best cost and performance along with logging, monitoring and tracing.

• Qii.AI | AUGMENTED REALITY DEVELOPMENT INTERN

May 2021 — April 2022

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

• AUSM Lab | RESEARCH ASSISTANT — YORK UNIVERSITY

May 2020 — April 2021

Carried 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 | BACK-END ENGINEER

August 2020 — March 2021

Worked on a startup with a team of six, reinventing how car owners book, service, and track their car repairs. Designed, built and deployed the back-end services. Built a Node.js GraphQL API using Express server and MongoDB as the NoSQL data layer.

SKILLS

- Computer Languages: Bash, C, C#, Java, JavaScript, HTML, CSS, Python
- Technologies: Azure, CI/CD, Docker, GraphQL, Kubernetes, MongoDB, Node.js, Redis, Terraform, Unity
- Design, Photo & Film: Adobe | Photoshop, Lightroom, Premiere Pro

PROJECTS

• Home Lab and Self Hosting | Docker, Linux, Nginx, Proxmox, Prometheus, Grafana

Configure and manage a virtual private server with several services. Secured 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 among other services. Deploy and run a Tor middle relay to donate bandwidth to the Tor network. Build and manage a home-lab NAS Server running TrueNAS.

• ShopUnicorn Store | React, Node.js, Express, MongoDB

Design, implement, test and deploy an e-commerce application that supports customers and administrators. The back-end is well-documented, built with microservices and an API gateway based on *Clean Architecture* by Robert Martin for modularity and maintainability. All the services were containerized and deployed behind an Nginx server.

• Secure Help Desk | Node.js, Socket.IO, Identity Server, THC Hydra, Wfuzz

Develope a help-desk web application that allows communication for online support with a team of four. Chat was implemented using sockets on a Node.js server. Authorization and session management were implemented using Ory Identity Server. Attack test cases for password cracking, SQL injection, Cross-Site Request Forgery (CSRF), Cross-Site Scripting (XSS) and OWASP ZAP tests were performed.