Naman Sood

mail@nsood.in | www.nsood.in | 437-215-7822 | linkedin.com/in/namansood | github.com/namansood

SKILLS

Languages	JavaScript, Go, Rust, C++, C, Scala, HTML5, CSS3, Bash, Racket, Python
Technologies	Linux, Git, Docker, AWS, Nginx, Apache, gRPC, React, SQL, MongoDB, Firebase

EXPERIENCE

Tailscale
Jan 2021 – Apr 2021

Software Engineering Intern

- Boosted compatibility with cloud environments by providing in-process network infrastructure, using Google gVisor sandbox.
- Enabled simple, standard communication for programs over Tailscale network by creating a SOCKS5 proxy server in Go.
- Simplified deployment of Tailscale in containers by creating ephemeral authentication keys with auto-cleanup mechanism.
- Secured continuous integration and deployment pipelines by creating GitHub Action to allow workflows to use Tailscale.
- Improved support experience by documenting common administrative tasks as knowledge base articles.

University of Waterloo
May 2020 – Aug 2020

Research Associate, Sirius Blockchain Research Group

- Hardened security by enforcing BLS signature verification for Byzantine fault tolerant distributed consensus system in Go.
- Streamlined deployment of project, using Docker images to generate repeatable builds across diverse environments.
- Unified similar codebases by migrating components to a single project to reduce code duplication, using C++.
- Assisted distributed systems research by conducting experiments on AWS and analyzing performance data using gnuplot.

Creesync Software
May 2019 – Aug 2019

Software Engineering Intern

- Simplified professional photography, by building native apps to deliver photos to clients, using Electron and React Native.
- Designed and deployed API to upload and preview photos in low-bandwidth situations, using Node.js and AWS S3.
- Reduced technical debt in React Native project by combining similar functionality into reusable components.

The Girl Code
Mar 2018 – Apr 2020

Full Stack Developer

- Empowered school children by creating online platform to learn Python programming, using Node.js and MongoDB.
- Assisted research by tracking usage of learning platform to collect data for National University of Singapore study.

PROJECTS

CHIP8-rust *Rust*
Emulator for CHIP-8 microprocessor. Simulated behavior of machine instructions with Rust, created graphics in framebuffer.

Prose *Go*
Markdown-powered blog. Developed custom HTTP server with hooks for web request logging, routing and error handling.

Turtle Shell *C, POSIX APIs*
Shell for Unix operating systems in C. Learned memory management, process management, and usage of POSIX interfaces.

cmdmap *Node.js*
Node module to map CLI programs to a JSON API. Designed abstraction over standard library features for improved security.

EDUCATION

University of Waterloo
Sep 2019 – Apr 2024 (expected)

Candidate for Bachelor of Computer Science – 94.5%

- **Awards and Honors:** Received $15,000 Computer Science Upper Year Scholarship, and placed on Dean's Honors List.
- **Mentor, StarterHacks 2020:** Provided technical and design advice in Canada's largest beginner-focused hackathon.
- **Editor, mathNEWS:** Provide news and recreation to student body via student publication of the Faculty of Mathematics.