

SAI RIJAL

4A COMPUTER ENGINEERING

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OVERVIEW

Languages: JavaScript, Python, Go, Java, TypeScript, C, C++, C#, SQL, HTML
Frameworks: Android, NodeJS, Django, Gin/Martini, Vue, Angular, React, Sails, .NET
Technologies: Docker, Kubernetes, Nginx, MySQL, Postgres, Redis, RabbitMQ, Celery

EXPERIENCE

NVIDIA *Santa Clara, CA, USA*
Web/Database Applications Architect *Jan – Apr '18*

- Leveraged Go with Gin framework along with MySQL to create an API to automate configuration changes on around 10000 servers, allowing agile configuration changes and better utilization of resources.
- Developed a web application leveraging above API to allow delegation of these tasks to other employees.
- Utilized GitLab, Jenkins, Artifactory, Docker, Kubernetes, Rancher, and Kong to build a continuous integration, testing, and continuous delivery pipeline to streamline deployment of other applications

Vigilant Global, A DRW Company *Montreal, QC, Canada*
Software Developer Intern *May – Aug '17*

- Developed an application to parse data from switches, FPGAs, and Hypervisors and keep track of their availability, location, status, and connections in a PostgreSQL database.
- Used RabbitMQ and Celery to queue tasks to automatically configure switches/FPGAs and create VMs/Containers for trade execution purposes, saving man hours and capital.
- Implemented High Availability for multiple applications with the use of Docker and Docker Swarm, reducing the possibility of critical applications going offline during trading events

Shaw Communications *Calgary, AB, Canada*
Computer Science Intern *Sep – Dec '16*

- Migrated applications to use Docker, improving logging and reducing use of system resources.
- Added scheduling feature to Video-On-Demand management application preventing the need for Shaw operators to come into work at midnight to make VOD menu changes.
- Updated legacy back-end JS code to use ES6 tools such as promises, arrows, and destructuring.

TD Lab *Kitchener, ON, Canada*
Solutions Developer *Jan – Apr '16*

- Explored emerging technologies such as HoloLens, Vuforia, and NFC and used the knowledge to develop Android, web, and virtual reality applications with banking uses.

PROJECTS

Get Some Fish *getsomefish.sairijal.com*

- Web app developed using Flask and Materialize hosted on Google App Engine.
- Allows users to find the right kind of pet fish depending on water qualities like pH and hardness.

Android Projects *goo.gl/UpXLuS*

- **Material Compass** | Compass app that employs Material design and filters noise from sensors using Gaussian low pass filters.
- **HexClock** | Android implementation of HexClock by jacobocolo
- **Material Alarm** | Proof of concept of Material design based alarm app. Demo @ *goo.gl/7Uo9tg*.

Personal Site and Blog [retired] *legacy.sairijal.com*

- Personal site and blog written in Python and hosted on Google App Engine.

EDUCATION

University of Waterloo *Sep '14 – Apr '19*
Honours Bachelor of Applied Science, Computer Engineering