

# ARUN RANGANATHAN

arun.ranga@hotmail.ca ◇ in/arunranganathan ◇ github.com/Arun4rangan

## SUMMARY

---

- Experience building and maintaining robust distributed scalable systems.
- C++ (CMake), Python, Java (Android), JavaScript, SQL, Golang, C, NodeJS
- Node.js, Django, Angular 2, AngularJS, CloudSQL, PostgreSQL, MySQL, RabbitMQ, Redis, Kubernetes, OpenShift, Celery, gRPC, TensorRT, TensorFlow, OpenVINO, OpenCV, NumPy, Java, Protocol Buffers

## EXPERIENCE

---

### Paravision

April 2019 – Present

*Computer Vision Engineer*

*Toronto, ON*

- Decreased latency by 19% and improved throughput by 150% by re-architecting streaming app with asynchronous networking and parallel computing principles.
- Quadrupled throughput of ETL by scaling with Kubernetes speeding up model training time.
- Constructed facial recognition gRPC server with clients in C#, NodeJS, Python3 and C++.
- Built liveness C++ SDK on Windows and Linux using OpenCV, Tensorflow, TensorRT and OpenVINO.

### The League

May 2018 – August 2018

*Backend Developer*

*San Francisco, CA*

- Develop core micro-services that replaced parts of monolithic backend deployed in GCP Kubernetes.
- Reduce number of calls to PostgreSQL by implementing trigger based caching.
- Create unit and E2E testing to support integration of micro-services.

### The League

January 2018 – April 2018

*Android Engineer*

*San Francisco, CA*

- Rewrite the messaging platform. Optimize how messages are received, stored and managed.
- Increase user activity by developing custom photo-messaging capabilities in chats and optimizing the loading and uploading of photo-messages.

### Aspire Financial Technologies

August 2016 – April 2017

*Backend Developer*

*Toronto, ON*

- Develop query-able RESTful API endpoints on Django.
- Engineer aggregating algorithms that compile into complex financial math on PostgreSQL and optimized it to run in real time.

## OPEN SOURCE / PROJECTS

---

### Redis

In-memory Database

- Show threading configuration in INFO output [#7446](#) & [#1353](#)

### CockroachDB

Distributed SQL Database

- Add support for Pow binary operator for vectorized execution engine [#50143](#)
- Add ability insert DB2 formatted timestamps [#50011](#)
- Coerce invalid geography coordinates into geometry [#50457](#)

### Pino

Low overhead Node.js Logger

- Allow custom levels to override default and allow to remove default levels [#515](#)
- Add ability to change level name when creating the instance [#503](#)

### gTasker

Chrome Extension

- Create chrome extension to manage day to day tasks while browsing the internet. Performs CRUD operations on Google OAuth2 API and Google Calendar API. This Chrome Extension is published in Google Play Store.

### GenoDonor

Genome encoding hackathon

- Worked with 3 other co-workers to create a front-end using React and Node.JS based backend. Create a Web App for sperm donors where users can filter and search for specific genome traits based on donor.

## EDUCATION

---

### University of Waterloo

*April 2019*

Bachelor of Applied Science in Honours Nanotechnology Engineering With Distinction