ARUN RANGANATHAN

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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, React

EXPERIENCE

Top Hat   September 2020 – Present
Full Stack Engineer   *Toronto, ON*

· Worked on textbook version control system which accounted for 50% of Top Hat's revenue.
· Developed front end UI for merge control that allows existing content to be updated with professors discretion.
· Improved merge control flow architecture that allows auto-revision of textbooks to be sent between any content.
· Refactored old code into more readable code while improving the performance by nearly 90%.
· Formulated a new business idea, created a proposal and worked POC by recruiting 3 software developers and a product manager.
· Interviewed software engineering candidates and helped hire few engineers.
· Helped debug P0 bugs and device an immediate and long term solution to the problem.
· Onboard and mentor new team members and be always be available to pair on a problem.

Paravision   April 2019 – Present
Computer Vision Engineer   *Toronto, ON*

· Decreased latency by 19% (P95) and improved throughput by 150% (P95) by re-architecting streaming app with asynchronous networking and parallel computing principles.
· Quadrupled ETL throughput (2MM to 8MM) by scaling with Kubernetes speeding up model training time.
· Configure Openshift platform to host micro-services on bare-metal.
· 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.

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   Augest 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

Lavoro   ATS Helper
· Chrome extension to better match your resume with the job description. Ranking algorithum to rank keywords in your resume against job description. Built with Vue.js.

Redis   In-memory Database
· Show threading configuration in INFO output **#7446** & **#1353**

CockroachDB   Distributed SQL Database
· Pow binary operator [**#50143**]. DB2 formatted timestamps [**#50011**]. Coerce invalid geography [**#50457**]

Pino   Low overhead Node.js Logger
· Custom log levels and remove default levels [**#515**] . Change log level name [**#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