

DAVID GAO

SKILLS

Programming Languages	Go, Java, Python, Perl, Bash
Frontend Frameworks/Libraries	React, Vue.js, Node.js, Angular
Databases	MongoDB, Aerospike, InfluxDB, MySQL, PostgreSQL
DevOps	Docker, Kubernetes, Terraform, Ansible, TICK Stack

WORK EXPERIENCE

Full Stack Engineer | Paymentus Corp. November 2020 – Present

- Constructed a **React** app to display hundreds of rows of invoice data in a report format for an international business under a strict deadline
- Composed **Node.js** scripts to aggregate invoice data from **MongoDB** and deliver the output to clients
- Implemented Node.js scripts to store output files to **AWS S3** and **MinIO** using **Kafka** for redundancy
- Created **Terraform** plans to automate **Kubernetes** pod generation when the cron jobs are scheduled
- Refactored public facing React components to be generic and AODA compliant for improved reusability

Software Engineer | Index Exchange Inc. May 2019 – November 2020

- Redesigned a legacy UI, that displays hundreds of thousands of complex data structures, to improve scalability and the user experience using **Angular 6** on the front-end, and **Node.js** for the **RESTful APIs**
- Implemented and negotiated a solution, with a third-party user identification provider, to encrypt their cookie data using RSA-OAEP and have the data decrypted in real time with a **Go** service
- Developed a caching project to store a service's response saving network calls and computational latency on subsequent requests
- Lead a team to create a Go service, using **gRPC** and taking advantage of **Aerospike's** cross data replication capabilities, enriching all streams of data resulting in higher value bids
- Won second place in Hackathon by tweaking existing services to display PSAs on unsold ad spaces
- Introduced the rotational "Operational Excellence" role company-wide so engineers are always mindful of monitoring and alerting when developing features

PROJECTS

IXAccomplishments March 2018 – April 2018

- Sole developer of the **React** web application to give and receive recognitions on a day to day basis
- Utilized **Bootstrap**, and **SASS** to implement a responsive design used for TVs, desktops and mobile
- **Dockerized** the application to lay the foundation for continuous integration and continuous delivery
- Backend, written in **Node.js**, retrieves user profiles, acknowledgments and rewards from **MongoDB**

TaskUp November 2014 – May 2015

- Co-developed the android application in **Java**, allowing communities to upload tasks in order to increase volunteer opportunities and hours in the neighborhood
- Taskup received over 100 downloads and 20 reviews a month after launch on the Google Play Store

EDUCATION

University of Toronto September 2015 – April 2019

- Honours Bachelor of Science - Software Engineering Stream