JASON KIM

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SUMMARY

- Experience with Python, Java, Javascript, Kafka, Kubernetes, Docker, PostgreSQL, Django, Spring, React.js, Redux
- Interested in distributed systems, cloud architecture, data engineering, and data visualization

EXPERIENCE

FORMLABS | SOFTWARE ENGINEERING INTERN
Boston, MA | Sep. 2018 - Aug. 2019

Dashboard Team developing customer-facing web dashboard for 50k active users & core Formlabs API with 57m+ daily throughput

- Shipped Formlabs Developer API as containerized service - designed **Django** based REST API, created multi-environment server settings for OAuth 2, rate limit, and memcaching, and configured **Kubernetes** models for pod connections, Ingress, and load balancing
- Shipped remote print feature for Formlabs API - developed data pipeline between printers, the API, and in-house software services, as well created custom **Python** based **AWS Lambda** operator to automate print job uploads and validations to **AWS S3**
- Integrated **Kafka** into core web infrastructure - streamlined printer requests into multiple Kafka topics, created core consumer group for data consumption to the API, as well centralized **Kafka Connect** instance from **Kafka** to production Amazon RDS database

ECOBEE | SOFTWARE ENGINEERING INTERN
Toronto, ON | Jan. - Apr. 2018

Admin Portal Team developing multiple help-desk features for ecobee products; currently in used by 100+ customer support employees

- Developed advanced filter feature for **ElasticSearch** based search engine, enabling pre-filtered data streams from **Kafka clusters** to in-house microservices via **Kafka Stream**
- Integrated OAuth 2 flow between high-traffic microservices and created secured data pipelines to **AWS S3** via signed URLs in **Java**
- Implemented metrics monitoring system by constructing JMX, Prometheus, and Grafana instances as part of **Docker** containers

CHEFHERO | SOFTWARE ENGINEERING INTERN
Toronto, ON | May - Aug. 2017

Product Team developing the company core product

- Automated user registration by developing interactive sign-up flow in React.js/Redux & Python based API design in Google App Engine
- Overhauled the company landing page using **React.js** by minifying and componentizing a Jinja based legacy codebase
- Integrated analytics architecture using **Google Analytics**, as well a live Intercom chatbot to construct active user feedback pipeline

ROGUE WAVE SOFTWARE | SOFTWARE DEVELOPER INTERN
Ottawa, ON | Sep. - Dec. 2016

Core Team developing main functionality of Klocwork, a static code analysis tool for IDEs

- Built a multi-environment caching feature to improve run-time of **Python** automation test suites by 23%
- Developed a test failure per-build comparison tool using TestLink API, currently in use by 20+ employees

PROJECTS

- **GRAPHQL API**   Ecobee hackathon project overhauling legacy RESTful API into GraphQL queries and mutations (**React.js**, **GraphQL**)
- **EMOTIONTUNES**   Web app that generates music playlists based on emotions detected via facial expression recognition (**React.js, Emotion API**)
- **MEMORYBOUND**   Desktop calendar app, per-user & authenticated reminder logging feature with multi-threaded notification capabilities (Java)

EDUCATION

UNIVERSITY OF WATERLOO
Waterloo, ON | Sept. 2015 - Present

Candidate for BASc Mechatronics Engineering

- President's Academic Scholarship
- Relevant Courses: Algorithm and Data Structures (**C++**), Real-time Operating Systems (**C**), and Engineering Statistics