Kanav Petkar

aspiring software engineer

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💼 Experiences

Software Engineering Intern
Present

Splunk
📍 San Jose, CA

Java • Spring • Pulsar • Kubernetes

- Working on automating risky behaviour detection using ML for a Splunk next-gen product

Software Engineering Intern
Summer '20

Autonomic.ai
📍 Palo Alto, CA

Java • Spring • Go • Kafka • gRPC • PostgresSQL • TDD • DynamoDB

- Shipped scalable **gRPC** cloud-native microservices capable of handling *millions of concurrent requests* using **Java Spring Boot, Kafka** and **Postgres SQL** running on **Kubernetes**
- Developed archiving PoC using **Java Spring Boot** and **DynamoDB,** while utilizing *horizontal database sharding with dynamic indexing* to handle millions of messages daily
- Participated in Extreme Programming and TDD to develop *highly available, fault-tolerant microservices*

Lead Developer (Contract)
Winter '20

Squired.co
📍 Toronto, ON

React.js • Node.js • Express.js • PostgresSQL (AWS RDS) • AWS Lambda • AWS SES

- Maintained roadmap and led team of 3 other developers to develop backend for a web application
- Shipped serverless API using **Node** and **Express**; deployed on AWS using **APIGateway** and **Lambda**
- Implemented functional **React** components based on in-house designer designs
- Architected Data Model and implemented **PostgresSQL** database on AWS RDS

Site Reliability Engineering Intern
Fall '19

Autonomic.ai
📍 Palo Alto, CA

Go • Kubernetes • AWS • Docker • Helm • Prometheus • Grafana • Bash • CircleCI • Git

- Shipped Kubernetes controller to automatically reload resources whenever a secret or configmap change was detected, using **Go, Docker** and the **Kubernetes API** reducing service downtime by *30%*
- Implemented **AWS RDS Instance** with **S3 bucket** for storage and backups to ensure fault tolerance
- Designed dynamic alert routing system using **Helm, Bash**, **Prometheus** and **Alertmanager** reducing incident response time by *80%*

Software Engineering Intern
Winter '19

Toyota
📍 Cambridge, ON

.NET • Angular.js • SQL Server • Node.js • SVN

- Shipped weld measurement system built with Mitsuya Bluetooth Calipers, **.NET, Angular.js**, and **SQL Server**, saving Toyota *$74,460 annually* during scheduled destructive testing
- Presented system to Toyota management in Japan and system subsequently *filed for patent*

📂 Selected Projects

GoCal CLI
2020

Open-Source Google Calendar CLI written in Go

Breast Cancer Decision Support System
2019

ML application to diagnose breast cancer built with Flask and linear regression

Airdrums
2019

Computer Vision Based Drumkit written in Python (OpenCV, NumPy)

🎓 Education

BaSC in Management Sciences-Engineering
Class of 2022

University of Waterloo
📍 Waterloo, ON

- Received Faculty of Engineering Scholarship and President's Scholarship
- *Relevant Courses:* Systems Programming, Data Structures and Algorithms, Databases, OOP

Skills

Languages
Go, Java, Python, Bash, C#, JavaScript, HTML, CSS, SQL

Cloud Technologies
Kubernetes, Docker, AWS Terraform, Prometheus, Helm

Frameworks
Node.js, React.js, Express.js Kafka, Spring Boot, Django

Database Technologies
SQL Server, Postgres SQL

Miscellaneous
Git, Agile Methodologies Test-Driven Development

Certifications

- Six Sigma Green Belt
- Toyota Business Practices
- Udacity Data Analyst
- MEAN Stack Development

Co-Curriculars

UW Ecocar
Autonomous developer on the traffic signal perception team. Used OpenCV, Python and ROS.

Quizbowl Society
President of Quizbowl Society. Organized practices to help with pursuit of excellence in the trivial arts

Interests

- Vim
- Baseball
- Calligraphy
- Philosophy
- Cognitive Science