# VIKRAM KANNAN MURALIDHARAN

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### **SUMMARY**

An aspiring Software Engineer who is creative, likes to explore new technologies, a quick learner and loves challenging roles

## **EDUCATION**

# Master of Science in Computer Systems Engineering (GPA: 3.733)

09/2019 - 12/2021

Northeastern University, Boston, MA, USA

Relevant Courses: DevOps, Enterprise SW design (Spring framework), Web Design and UX (MERN stack)

## **Bachelor of Technology in Information Technology**

08/2015 - 06/2019

Sri Venkateswara College of Engineering (Anna University), India

Relevant courses: Data structures and Algorithms, Object Oriented Programming, Mobile Application Development (Android)

## **TECHNICAL SKILLS**

**Programming Languages** : Java, JavaScript, Python, Kotlin, SQL, C/C++

Back-end development : Spring Boot/MVC (J2EE), NodeJS, OAuth, Basic and JWT Authentication, JDBC, JPA, Hibernate, SOAP

**Database technologies** : RDBMS: MySQL, Oracle DB, SQLite, NoSQL: MongoDB, Redis, DynamoDB

Cloud and DevOps : Jenkins, Docker, Kubernetes, Terraform, AWS (IAM, EC2, ECS, S3, CloudWatch), Azure, GCP

Front-end development : React, Redux, HTML, CSS, Bootstrap, JQuery, AJAX, JSON, XML

Mobile Development: Native Android development (Java and Kotlin), AOSP building, Espresso, Retrofit, Glide, JunitTools and Platforms: Git, Gerrit, Boto3, GitHub Actions, Jira, Nginx, Maven, Selenium, Gradle, Unix/Linux, Windows

#### **WORK EXPERIENCE**

## Software Engineer Co-op – Kinze Manufacturing Inc., Iowa, USA

01/20**21 -** 09/20**21** 

- Developed **RESTful** web services and Junit **unit tests** for Kinze's BlueSky Spring boot server which are currently **used in Production**
- Carefully **architected MySQL database** schemas with the right balance between normalization and query performance
- Developed React/Redux frontend using function components, Hooks and styled components and hosted on AWS EC2 with Nginx
- Automated the entire build, test and AWS deployment process of Kinze's BlueSky Spring boot server using Jenkins CI/CD
- Developed new features, improved UI responsiveness, and fixed several bugs in Kinze's BlueVantage android app (Model Year 2022)
- Helped the test team by vastly reducing the time taken to obtain test results from 12 hours to 4.5 hours using Jenkins parallel run

## Software Engineer Intern – Ericsson, India

12/2018 - 06/2019

- Developed REST API endpoints with Spring Boot to stream raw data from a metrics file and serve it to a React frontend dashboard
- · Modified the React app to use function components and Hooks, and improved code quality resulting in 15% faster page loads

# **Software Developer (Part-time) – Sri Venkateswara College of Engineering**, India

09/20**16 -** 04/20**18** 

• Developed several projects for the college including the **official Android app** and e-Certificate Generator web app Video Demo

### **PROJECTS**

# **Get It Cheap Application –** Android and Backend project

Google Play store link | Video Demo | Android code

- Developed an Android app and launched it to Google Play store to solve a real-world problem of not being to find items for rent
- Built secure REST APIs (JWT Authentication) using Spring Boot with MySQL as the database and hosted it on AWS EC2
- Built a Continuous Integration workflow using GitHub actions and Continuous Deployment workflow using AWS CodeDeploy
- Technologies used: Kotlin, RetroFit2, Places API, MySQL, JWT, JDBC Template, AWS (EC2, S3, IAM, Elastic IP, VPC), Linux, Bash

**Twitter Clone –** Full stack and DevOps project (CSYE 7220 DevOps course work)

Video Demo | Source code

- Developed a microservices based Twitter clone using NodeJS (express) and React (hooks) with Queuing and caching mechanisms
- Deployed the microservices as containers using Docker and Kubernetes on Google Cloud Kubernetes (GKE) using Terraform
- Technologies used: JavaScript, NodeJS, MongoDB, RedisJSON, React, Docker, Kubernetes, Terraform