

Vishnu Simha Dussa

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Professional Summary

Results-driven **Software Engineer** with **3+ years** of industry experience in building scalable **Spring Boot microservices**, crafting intuitive **React** and **Android (Kotlin, Java)** applications, and deploying solutions on **AWS**. Skilled in developing robust backend architectures, optimising databases, implementing **cloud-native deployments** with **Docker** and **Kubernetes**, and automating **CI/CD** pipelines. Adept at leading full-stack projects, integrating IoT systems, and applying **data analytics and machine learning** for intelligent solutions. Collaborative team player experienced in **Agile (Scrum/SAFe)** environments, passionate about solving complex problems with innovative and efficient technology.

Technical Skills

- **Programming Languages:** Java, Kotlin, SQL, Python, Bash
- **Full Stack Development:** Spring Boot, Microservices, Cloud Gateway, JPA, Eureka, Resilience4j, HTML/CSS, React, JavaScript
- **Mobile (Android):** Jetpack Compose, Retrofit, Room, Hilt, Coroutines, Flows, Firebase, ADB, RX Java, GraphQL, NFC/BLE
- **Cloud & DevOps:** AWS, Docker, Kubernetes, CI/CD (Jenkins, SonarQube, GitHub Actions), Linux, Tomcat
- **Databases:** MySQL, PostgreSQL, Redis, NoSQL
- **Testing:** Test Driven Development (TDD), Unit Testing (JUnit, Mockito), Integration Testing, UI Testing (Espresso, Spring Test)
- **Build and Automation:** Maven, Gradle
- **Development Methodologies:** Agile (Scrum, SAFe), MVVM, Spring MVC, SOLID Principles, Design Patterns
- **Development Tools:** Android Studio, IntelliJ IDEA, VSCode, Zeplin, Figma, Postman, Swagger
- **Management Tools:** JIRA, Confluence, Miro, Trello, MS Office (Excel, Word, PowerPoint)
- **Version Control:** Git, Bitbucket, and Sourcetree
- **Competencies:** Problem-Solving, Analytical Thinking, Attention to detail, Team Collaboration, Adaptability, Stakeholder Engagement

Accomplishments and Certifications

- [AWS Certified Solution Architect - Associate](#)
- [AWS Certified Cloud Practitioner](#)
- Kubernetes | Udemy
- Docker for Java Developers
- Spring Boot (TDD, Security, Spring Data)
- SQL | HackerRank
- Volunteered Technical Symposium - 2018



Professional Experience

Software Engineer - HID Global

04/2019 – Present

- Spearheaded the end-to-end development of the **HID Mobile Access Android application (Kotlin)**, establishing secure credential provisioning and access control via **NFC/BLE**; directly contributed to HID's **R&D** efforts in physical access control systems.
- Led the modernisation of critical **Java modules to Kotlin**, resulting in a **40% reduction in code duplication** and significantly enhancing codebase **maintainability** and long-term **scalability**.
- **Optimised mobile application performance by 30%** by strategically utilising **profiling tools** and integrating **Coroutines, Retrofit, and OkHttp** for seamless **REST/GraphQL API** interactions, reducing app load times.
- Engineered and implemented robust **CI/CD pipelines** using **Jenkins** and **SonarQube**, which enforced stringent quality gates, reducing post-release defects by **25%** and ensuring full compliance with **enterprise security standards**.
- Achieved over **80% code coverage** through comprehensive **unit and UI testing (JUnit, Mockito, Robolectric, Espresso)**, reducing regression bugs by **25%** and accelerating release timelines.
- Strengthened **app security** by implementing **code obfuscation (Dexguard)** and **automated AAR testing**, ensuring compliance with **enterprise security standards**.
- Resolved customer issues on **ServiceNow** by conducting **root cause analysis** and **debugging** across Android versions, improving **app reliability** and maintaining consistently low open issues.
- Served as **Scrum Master** within a **SAFe Agile environment**, facilitating ceremonies and coordinating **cross-functional teams** (PMs, BAs, UI/UX) to **streamline project delivery**, effort estimation, and API definition.
- Architected and maintained high-performance **RESTful APIs** for a **microservices ecosystem** using **Spring Boot, Spring MVC, and Spring Data**; optimised **MySQL/PostgreSQL databases** to support **high-concurrency systems** and ensure **data integrity**.
- Implemented comprehensive **security protocols** including **OAuth2, JWT, and RBAC** with **Spring Security** for web and mobile applications, establishing robust **authentication and authorisation frameworks**.
- Integrated **caching strategies** with **Redis** and **Memcached**, resulting in a **30% reduction in application latency** for critical services.
- Utilised **message brokers** like **Kafka** and **RabbitMQ** to build efficient, **event-driven microservices architectures**, enhancing **system resilience** and communication
- Drove **IoT/Mobile guild** contributions via **knowledge-sharing** sessions and hands-on feature execution, fostering **cross-team innovation**.

Internships

Industrial Trainee - Mobile Testing, Robotic Arm - Full Stack IoT Project - HID Global

04/2019 – 08/2022

- Developed an automated robotic arm to test mobile gestures (e.g., BLE Twist, Tap) with Arduino and Node-RED, solving a manual and time-consuming testing problem for the QA team. This solution reduced testing time by 50%.
- **Technologies:** *Arduino, C++, Node-Red, Java, JavaScript, hardware (Stepper motors, servo motors, sensors)*

In-Plant Trainee - Industrial Battery Division - Amara Raja Batteries

21/12/2016 – 30/12/2016

In-Plant Trainee - Telecom Technologies - BSNL

01/12/2016 – 14/12/2016

Intern - Telecommunications Broadband - BSNL

18/12/2017 – 22/12/2017

Education

MSc in Electronic and Computer Technology (Computer Science & IoT) | [Dublin City University](#) | Honours: 2:1

09/2022 – 08/2023

B.Tech in Electronics and Communication Engineering | SRM University | Honours: 1:1

05/2015 – 06/2020

Additional Projects - [Portfolio](#) - [Github](#)

HID Global - [HID Mobile Access](#)

- Contributed to the development and maintenance of HID Mobile Access, including the app, SDK, and Android watch features. Managed tasks and effort estimation in JIRA, collaborated with a cross-functional agile team, and worked on both sprint stories and customer issues.
- **Technologies:** *Kotlin, Java, Jetpack Compose, XML, Material Design Components, Navigation, State Management, Retrofit, Room, Hilt, DataStore, Firebase, Coroutines.*

Full-Stack Microservices-Based Social Chat Application

- Developed a social chat and feed app using **Java (Spring Boot) and React** with a robust microservices architecture.
- Built core RESTful APIs using Spring Boot, JPA, MySQL (prod), and H2 (dev) for user/auth management (JWT), posts, comments, and personalised feeds with Spring Cloud Gateway and Eureka.
- Implemented Resilience4j circuit breakers, DDD, and REST principles with unit testing (JUnit, Mockito).
- Created a companion Android chat application using Kotlin and Jetpack Compose, seamlessly integrating with backend APIs.
- **Technologies:** *Java 17, Spring Boot, Spring Cloud Gateway, JPA, Eureka, MySQL, JWT, React 19, JavaScript (ES6+), HTML5, CSS3, Docker, Gradle.*

StockKeeper - Android Stock Management App - 2024

- Developed an app for efficient inventory management in homes and businesses. Features include real-time stock tracking, customisable alerts, and purchase optimisation.
- **Technologies:** *Kotlin, Jetpack Compose, Retrofit, Hilt, Firebase, Coroutines.*

Intelligent Indoor Air Quality Monitoring System - Master's Project in IoT

- Designed and implemented an IoT-based Indoor Air Quality Monitoring System using Raspberry Pi and Adafruit SCD40 Sensor. Monitored CO2 levels, humidity, and temperature for automated vent control and optimal air quality. Developed an Android app for real-time data visualisation and alerts. Conducted comparative analysis to improve system efficiency.
- **Technologies:** *Python Flask, Raspberry Pi, Linux, Edge computing, Data collection and Analysis, Cloud Storage.*

Full-Stack Web Applications for Online Business, and TakeAway Restaurant

- Developed a full-stack web application for an online business and a takeaway restaurant using Spring Boot (MVC) and MySQL database.

React Portfolio Application

- Developed a personal portfolio using React, featuring project work, CV, Blogs, and contact options.

Data Analysis and Machine Learning Project

- Developed a predictive model for human activity recognition using supervised learning & sensor data.
- Conducted performance analysis & model selection on the Extrasensory dataset.
- **Technologies:** *Python, Jupyter Notebook, Pandas, NumPy*