



BALPREET SINGH JAGGI

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SUMMARY

Experienced Full Stack Developer with 8+ years of experience seeking a challenging role to leverage my expertise in Java, Spring Boot, Angular, and IoT solutions. With a proven track record in full-stack development, I am passionate about building innovative solutions that drive business value. My strong foundation in Java and Spring Boot, combined with proficiency in Angular, allows me to deliver robust and scalable applications.

SKILLS

- **Programming:** Java, Spring Boot, C/C++, TypeScript, JavaScript, HTML, CSS, EPL
- **Frontend:** Angular, RxJS, Node.js
- **Backend:** REST APIs, Docker, libcurl, AWS SDK, Paho MQTT CPP
- **Database:** SQL, PostgreSQL, MongoDB
- **Testing:** JUnit5, Mockito, GUnit, JEST

EXPERIENCE

Engineering Lead / Persistent Systems - Toronto

11/2022 - Current

- Lead development of IoT solutions using **Angular**, **Java Spring Boot**, and microservices architecture.
- Architected and deployed backend microservices with **REST APIs** and **Docker** for scalable IoT systems.
- Developed secure device agents with **C++**, **AWS SDK**, and **Paho MQTT CPP** for real-time communication.
- Built and maintained **Azure CI/CD pipelines** for automated deployments.
- Implemented **Apama EPL** for real-time streaming analytics.
- **Mentored junior developers** and led a cross-functional team, ensuring adherence to best practices and code quality.
- **Led technical discussions** with cross-functional teams to align project goals, address challenges, and improve system design and integration.

IoT Consultant / Software AG - Toronto

07/2018 - 10/2022

- Developed and deployed microservices using **Java Spring Boot** and **REST APIs** for IoT solutions.
- Created IoT device agents using **C++** and **Java**, integrating with **libcurl** and **AWS SDK** for data exchange.
- Built and extended web applications using **Angular** and **HTML/CSS**, enhancing user interfaces.
- Developed complex event processing applications with **Apama EPL** for real-time analytics.
- Automated deployments using **Azure CI/CD** scripts for seamless application updates.
- Conducted unit testing with **JUnit5**, **Mockito**, and **GUnit** to ensure code quality.

Student Employee / Software Ag - Darmstadt

09/2016 - 05/2018

- Created a comprehensive educational package with tutorials and exercises for university students learning Apama
- Conducted tutoring sessions to assist enrolled students.

Software Engineer / Aricent Group - Gurugram

09/2014 - 03/2016

- Developed and extended multiple desktop applications for clients such as GoPro and ABB
 - Supported the testing team by improving and debugging an internal application for automation test suites
 - Utilized multiple technologies such as C, Java, JavaFx, and C#.
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PROJECTS

CITEGESTION – IoT Integration for Manufacturing

Jan 2024 – Present

Role: Cumulocity IoT Consultant (Frontend & Backend Development)

- Developed a widget using OpenStreet Maps to visualize 10,000 devices and their real-time events with color-coded alarms.
- Added filtering for devices/events by time range and enhanced real-time monitoring.
- Utilized Angular's asynchronous features (Promise.all, RxJS) for efficient data retrieval.
- **Technologies:** OpenStreet Maps, Angular, REST APIs, Async Promises

Shape Technologies – IoT Integration for Manufacturing

Oct 2023 – Feb 2024

Role: Cumulocity IoT Consultant (Frontend & Backend Development)

- Integrated Apama Streaming Analytics, addressing scalability and cross-device compatibility.
- Created custom widgets and microservices for real-time data management and high-volume data processing.
- **Technologies:** Angular, REST APIs, Docker, Apama EPL, Azure CI/CD

Boston Scientific – Axeda Migration for Healthcare

Apr 2021 – Present

Role: Cumulocity IoT Consultant (Frontend & Backend Development)

- Led migration from Axeda to Cumulocity IoT for 20,000+ devices, developed C++ agents with Paho MQTT CPP.
- Implemented AWS SDK file management features and created Azure CI/CD pipelines.
- **Technologies:** Paho MQTT CPP, C++ AWS SDK, Azure CI/CD, Docker, Angular, REST APIs

Deutsche Telekom – Smart Home Migration to Cumulocity IoT

Oct 2019 – Aug 2020

Role: Cumulocity IoT Consultant (Frontend Development & Apama Developer)

- Developed a custom UI widget for multi-floor navigation and EPL application for sensor data aggregation.
 - Tackled scalability and data accuracy challenges across multi-building, multi-country setups.
 - **Technologies:** EPL, Angular, Node.js, Git, Jenkins, Agile
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EDUCATION

Master of Science(Distributed Software Systems)

05/2018

Technische Universität Darmstadt - Darmstadt

Bachelor of Engineering(Computer Science)

05/2014

Panjab University - Chandigarh