Hamza Bin Khalid

Northampton, UK
07440359316 • hamzabinkhalid999@gmail.com
https://www.linkedin.com/in/hamza-bin-khalid-3ba711107/
https://hamzabinkhalid.github.io/portfolio/

Summary

A skilled and passionate Software Engineer with experience in building scalable and robust applications for the financial industry using Java and Spring. Looking for a Software Engineer/Developer position where I can apply my clean coding, communication, and collaboration skills, as well as learn new technologies and trends in the industry.

Skills

- **Programming languages:** Object Oriented Programming using Java and C/C++, Android, SQL, Neo4j, HTML, CSS, JavaScript, Python, TypeScript, XML, JSON
- **Libraries, tools, and frameworks:** Spring Framework, SpringBoot, Jenkins, AWS Cloud-Based Services, OpenShift, ELK Stack, SonarQube, Veracode, AppDynamics, Karate Framework, Git, Bitbucket, Junit, Nexus, Maven, HTML5, CSS3, Bootstrap, Mockito, Docker, OpenAPI Specification (OAS), Swagger, Flask, DeepLearning, Google Colaboratory, Slf4, Log4j, Filebeat, Jira and Confluence
- **Databases:** Apache Kafka, Aerospike, MySQL, Neo4j, MongoDB and pgAdmin
- **Operating systems and environments:** Eclipse, IntelliJ, Visual Studio Code, Apple macOS, Windows.
- Knowledge and working experience of Agile and Waterfall methodologies.
- Strong leadership, communication, and collaboration skills.
- Skilled in critical thinking, logic, and math.

Professional Experience

Software Engineer, Barclays, Northampton, UK
(November 2022 – Present)

- Developed and maintained high-performance applications for a new fraud detection platform that prevented over £100k of fraud losses per month for the company and customers, using agile methodology and design specifications while working in a diverse and multicultural team including members from UK, USA and India.

    - ✓ Utilized technologies: Java, Spring, Kafka, Aerospike, Maven, Jenkins, OpenShift, AWS, BitBucket, TypeScript, XML, JSON, ELK Stack, SonarQube, Veracode, AppDynamics, Karate Framework, Bitbucket, JUnit, Nexus, Maven, Mockito, Docker, Swagger, Slf4, Filebeat, Jira and Confluence

- Deployment:
    - ✓ Used Jenkins CI/CD build pipeline tool to deploy services efficiently in various environments, such as DEV, UAT/SIT, and VPT.
    - ✓ Leveraged AWS and OpenShift platform to host the services and ensure their scalability and reliability based on the requirements.

- Code Quality:
    - ✓ Ensured code quality and modularity.
    - ✓ Applied fundamental best practises, and coding standards.
    - ✓ Conducted code reviews and implemented performance tuning techniques.
    - ✓ Onboarded applications onto and used SonarQube platform for continuous inspection of code quality to detect bugs and code smells and then fix them.

- Security:
    - ✓ Onboarded applications onto and used Veracode to scan and fix any security vulnerabilities in the applications.
    - ✓ Implemented and tested different HTTP Authentication Schemes for the APIs, such as TIAA and Basic Authentication.
    - ✓ Developed new REST APIs that could encrypt, decrypt, and tokenize keys and salts for the applications that needed to protect sensitive data.
    - ✓ Configured and stored the secrets/credentials for each service securely using secret management technologies.

- Performance:
    - ✓ Used Kafka to stream data between microservices, reducing latency and improving scalability.
    - ✓ Updated the technologies and dependencies of the applications carefully, ensuring better performance and functionality.
    - ✓ Implemented ELK Stack for the APIs to collect, analyse, and visualize logs.
    - ✓ Onboarded applications on AppDynamics for better performance monitoring and testing.

- Testing:
  - ✓ Supported QA to perform tests on API functionality using Karate Framework.
  - ✓ Fixed bugs and expanded capabilities of the microservices in the architecture.

- Documentation:
  - ✓ Generated OpenApi Specification (OAS) for the APIs using Swagger.
  - ✓ Documented the APIs clearly and consistently, following the agile and audit requirements of the organization.

- Other tasks:
  - ✓ Reviewed and compared the old and new Data Dictionaries received from the Data Architects and identified and resolved any gaps, conflicts, redundancies, or inconsistencies. Suggested and implemented the necessary changes in the codebase.
  - ✓ Designed, tested, and added code functionalities for customer and transaction profiling and aggregation based on the business requirements.
  - ✓ Created and tested TypeScript functions for the Business Analysts to interact with and perform operations on the transactions in an internal web application.
  - ✓ Modified the programming logic for collecting information from the incoming transaction payloads as needed and described in business requirements.
  - ✓ Checked the applications for readiness and ensured their successful deployment to each environment on AWS.
  - ✓ Collaborated with cross-functional teams to gather requirements and define software specifications.

Education

University of Northampton
(2021 – 2023)

MSc. Computing

- Favourite area of study: Object Oriented Programming using Java, enjoyed learning how to design and implement software applications using the principles of abstraction, encapsulation, inheritance, and polymorphism.
- Favourite module: Databases, learned how to model, store, manipulate, and query data using relational and non-relational databases. Also gained experience in using SQL, Neo4j, and workbench.
- Extracurricular project: Built my portfolio page using HTML and CSS, a few other web applications like Simon Game, Drum Kit, Dice Game and Start-up Website and hosted them on GitHub.
  Notable Modules – Visual Object Software (Java Programming) and Databases

University of Lahore
(2016 – 2020)

BSc. (Honours) Computer Science, 3.55/4 CGPA

- Favourite area of study: Mobile Application Development and Machine Learning, was fascinated by how to create user-friendly and intelligent apps that can solve real-world problems.
- Favourite class: Java Software Development Paradigm, learned how to apply various software engineering concepts and techniques using Java, such as object-oriented design, design patterns, testing, debugging, and documentation.
- Extracurricular project: Built an Android app that could compare the bitcoin rate from Google and localbitcoins.com and determine if it was profitable to trade or not. Used Android Studio, Firebase, and Google APIs to develop and deploy the app.
- Extracurricular project: Built a Tic Tac Toe and a Snake game using C++. Used graphics.h library to create the graphical user interface and implemented the game logic and rules. I also added some features such as score tracking, sound effects, and difficulty levels.

Personal Projects

Portfolio Page, HTML/CSS/Bootstrap
https://hamzabinkhalid.github.io/portfolio/

A Start-up Page, HTML/CSS/Bootstrap
https://hamzabinkhalid.github.io/startup-website//

The Dice Game, JavaScript/Dom Manipulation
https://hamzabinkhalid.github.io/the-dice-game/

Drum Kit Game, JavaScript/Advanced Dom Manipulation
https://hamzabinkhalid.github.io/drum-kit-game/

Simon Game, JavaScript/JQuery
https://hamzabinkhalid.github.io/simon-game/

References

Can be provided upon request.