Mo Sorkhpar
Senior Software Engineer

msorkhpar@outlook.com   linkedin.com/in/msorkhpar

Senior Software Engineer with **over 8 years** of experience, specialized in **Java**, **Spring Framework**, **SQL** and **NoSQL** databases, and Python. Dedicated to building scalable microservices, implementing DevOps practices, and leveraging cloud technologies to boost system performance, scalability, and efficiency. Demonstrated capability in both contributing and leading cross-functional teams on **15+ projects** across domains such as **Fintech**, Telecommunications, Logistics, Machine Learning, and Gaming. Committed to employing advanced engineering skills to tackle complex challenges, foster innovation, and drive enhancements in diverse technological environments.

Skills

Programming and scripting Languages:	**Java**, **Python**, Kotlin, C, Bash, Javascript
Frameworks:	**SpringBoot**, Spring Cloud, Quarkus, PyTorch, NetworkX
Testing:	**JUnit,** Unit Testing, Integration Testing, Mockito, TestContainers
Databases:	**PostgreSQL**, **MongoDB**, **Neo4j**, **Redis**, **Hibernate,** JPA, MySQL, ORM, SQL, RDBMS
Cloud Technologies:	**Amazon Web Services (AWS)**, **Google Cloud Platform (GCP)**
Development Methodologies:	Agile (Scrum), Kanban, Test-Driven Development (TDD)
Messaging Technologies:	**Apache Kafka**, RabbitMQ, REST (Restful), SOAP
DevOps:	**Docker**, **Kubernetes**, **Jenkins**, Gitlab CI/CD, Terraform, Nexus, Vault
Programming Essentials:	**Object-oriented (OOP)**, **Design Patterns**, **Multithreading**, Algorithms, Data Structures, SOLID, Troubleshooting, Debugging
Tools:	**JDK**, **Maven**, **Gradle, SonarQube, Git** (Git-Flow), IntelliJ, Splunk, Grafana, Prometheus**,** Jira, Confluence, Gitlab, GitHub, Bitbucket

Work Experience

Intellias,   **Chicago, IL**
Senior Software Engineer,   **(10/2021 - 07/2022)**
- Developed a reactive **microservices**-based sales platform for a German telecom's ePOS system using **Kotlin**, **Spring**, **MongoDB**, **Oracle DB**, **Kubernetes**, and Apache Wicket, enhancing operational efficiency across 3,000 retail branches.
- Implemented a cost-effective contract service solution, replacing an expensive licensing model with an open-source tool. This yielded an annual savings of **$10,000** and maintained system adaptability for future infrastructure changes.
- Orchestrated a team of 8 in a **scrum**-based environment, collaborating with over 70 developers.

Routetitan,   **Yerevan**
Senior Software Engineer,   **(04/2021 - 10/2021)**
- Spearheaded the back-end development of a Route Optimizer application for DHL Netherlands, enhancing delivery efficiency by solving up to 5000 vehicle routing problems daily with **Java**, Quarkus, **PostgreSQL**, **MongoDB**, Stripe API, and Google-OR tools. Achieved a groundbreaking improvement in system performance, reducing load times from 1800ms to 200ms.
- Persuaded the team to adopt a strategic pivot to a Product-as-a-Service (PaaS) model, fostering Routetitan's growth by optimizing resource allocation, aligning business processes with market demands, and establishing an innovative and competitive path.
- Led the deployment architecture overhaul using **Terraform** and **Gitlab CI**, integrating Hetzner-Cloud, **GCP**, and **AWS**, which optimized deployment processes and significantly cut operational costs.

Devolon,   **Yerevan**
Software Developer,   **(02/2020 - 02/2021)**
- Engineered the PCKT children's money management application, empowering parents with tools to monitor and control their children's spending. Integral in leveraging **ISO-8583** and **jPOS** for secure banking communications, facilitating seamless transaction processing.
- Initiated a **Grafana** and **Prometheus**-based monitoring system, which reduced customer support calls by 80% and boosted operational efficiency by enabling rapid detection and resolution of system issues.
- Collaborated within a diverse, scrum-based international team, focusing on API services and back-office management.

Farazpardazan,
Senior Software Engineer,   **(12/2016 - 01/2020)**
- Delivered the Hamrahcard Payment Assistant application, overseeing its growth to over **12 million** users and managing **2 million** daily financial transactions. This marked a significant contribution to the company's portfolio and user base expansion.
- Enhanced **SQL** query **performance**, achieving a 90% improvement in report generation speed and reduced execution times for complex queries, boosting system responsiveness and user satisfaction.
- Implemented and maintained a robust suite of internal services supporting **continuous integration** and **continuous delivery** pipelines, including Jira, Gitlab, **Gitlab CI/CD**, Nginx, **SonarQube**, Artifactory, and Nexus, laying the foundation for agile development practices.
- Directed the development of a Personal Financial Management application as **Product Owner**, overseeing a **scrum** team of 6. Achieved a milestone of **500K** active users by enhancing user engagement and product features.
- Streamlined the software development life cycle by integrating System Requirements Specifications (SRS), wireframes, UI designs, and API contracts, significantly improving efficiency and clarity in production processes.

PartGames Studio,
Java Back-end Developer, (01/2016 - 11/2016)
- Crafted a high-performance back-end service for an online physics game with 230K players, utilizing **Java**, Spring, **MySQL**, **Redis**, **Vaadin,** and **WebSocket**. Introduced comprehensive features, including real-time interactions, payment management, and a versatile back-office system for user and parameter management.
- Created and commercialized a scalable leaderboard management service, handling up to 5,000 requests per minute for 7 multiplayer games. This innovation extended beyond studio use, offering an API to external services and marking a significant contribution to the studio's technological portfolio.

Education

Master of Science in Computer Science, Indiana State University (05/2024)
- Spearheaded the integration of Wikidata and Wikipedia dumps to create a comprehensive dataset for **graph entity summarization**, utilizing **Java**, **Python**, **Neo4j, Linux, and AWS** to build a new standard dataset for machine learning research in graph summarization.
- Advanced an RGCN-based entity summarization algorithm in **Knowledge Graphs** with **PyTorch** and Optuna.
- Developed a **Mixed Integer solver** for the optimal vertex ordering problem in bipartite graphs, applying Python, **NetworkX**, and **PostgreSQL**, translating complex models into practical solutions.

Bachelor of Engineering in IT, University of Mazandaran (06/2017)