Mohammad Alamarneh

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Experience

Angi

Software Engineer II
April 2022 - Present

- Engineered and managed microservices, integrating with marketing tools (Iterable, Responsys) and enabling personalized marketing.
- Designed and implemented a large-scale data migration pipeline (utilizing S3, SQS, Kafka, and more) that transferred 100M+ user records from legacy sources to an RDS Postgres database in < 4 hours.
- Led the design of a modular schema for storing user communication preferences, enabling integration of various communication types (marketing, transactional) within an extensible framework.
- Resolved data inconsistencies across multiple sources, analyzing replicated data coming from several legacy and newer sources and ensuring data integrity.

Edraak

Senior Software Engineer (Contractor)
January 2022 - July 2022

- Introduced optimizations on the database and application level that improved the performance by at least 30%.
- Refactored the Learning Management System by optimizing the number of database queries it makes and combining multiple existing queries with bulk database actions.
- Cleanup application models to a more modular, inheritable, and abstract definition that allows a cleaner, more readable code base.

Quicko

Senior Software Engineer (Contractor)
July 2021 - January 2022

Expedia Group

Software Development Engineer II
May 2021 - July 2021

Jawaker

Software Engineer
February 2018 - April 2021

- Designed and implemented web systems in a distributed service-oriented architecture, using a stack that included: Clojure, Ruby on Rails, PostgreSQL, Redis, Cassandra, and other technologies.
- Designed and engineered a scalable matchmaking service that handled matching millions of users in real time.
- Collaborated with the team on scaling the architecture to handle 5x the traffic during quarantine.
- Led the technical design and implementation of several games (i.e. MonopolyDeal, Chess, and other board and card games) and products (Game Events, Competitions).

Education

Princess Sumaya University for Technology   *Amman, Jordan*
Bachelor of Science, Computer Science   *2014 - 2018*
- Graduation Project: Implementation of an autonomous driving system that runs solely on cameras.
- Part of several programming competitions (ACM ACPC, IEEEXtreme) and coding marathons.

Technical Skills

Systems and web:
Ruby, Clojure, Java, Python, Scala, Javascript, Typescript, C/C++
Frameworks and tools:
Ruby on Rails, Spring Boot, ReactJS, Scala Play, Python Django, Unity3D
Databases, memory, and infrastructure:
PostgreSQL, Snowflake, Kafka, MongoDB, Redis, Memcached, Cassandra, ElasticSearch, Grafana, AWS.

Projects

RDS PostgreSQL data migration pipeline
A data migration pipeline that was built to move data from legacy tables (MariaDB, OracleDB) to an RDS Postgres instance. Transferred 100M+ records in < 4 hours. Utilized Snowflake, S3, SQS, Kafka, and Spring Boot.

Player Matchmaking
A matchmaking service built in Clojure that matches players in a game under certain criteria. Built with scale and distribution in mind with a queueing system using Redis.

[Dynamic Redis Connection Pool](#)
Implementation of a connection pool in ruby, with a dynamic number of connections using several threading methods. The pool initiates with 0 connections, can reach up to a maximum, and frequently disconnects idle connections.

[Chess game engine](#)
Implementation of a chess game engine written in Clojure using http-kit for a WebSocket connection that handled messaging and real-time game updates.

Leadership Skills

Codability
Instructor
- Introduced STEM to 9-12 grade students, by offering a project-based electronics and programming engineering course.

Al-Hasad Al-Tarbawi Schools
Robotics Programming Coach
- Led the team in winning the 2nd place First Lego League Champions Award in Jordan, Lebanon, and the Open World Championship in Tenerife, Spain.
- Introduced the team to various programming and control theory concepts, curated through a project-based C++ introductory programming course.