Ahmad Musleh

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EDUCATION

Carnegie Mellon University

Bachelor of Science in Computer Science

Dec. 2015

Minor in Business Administration

QUALIFICATIONS

Backend: Python, Flask, Redis, Solr, Node

Databases: MongoDB, MySQL

**DevOps:** AKS, Kubernetes, Helm, Azure Pipelines

Mobile: Flutter

EXPERIENCE

## Qatar Computing Research Institute (QCRI) - Software Engineer

Doha, Qatar

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Zaman — Flutter, Python, Flask, Solr, MongoDB, Redis, AKS, Kubernetes, Helm, Docker — April 2018 - Present \* All features developed encompass containerization, deployment, accompanied Azure YAML pipeline and releases

- o Aided in building the Zaman news app. Main Page AppStore PlayStore
- Designed/Built/Released different features for the app and backend
- o Built iOS test flight release pipeline on Azure DevOps

SAQR — Python, Flask, Solr, MongoDB, Redis, AKS, Kubernetes, Helm, Docker, Node, Angular

- \* All features developed encompass containerization, deployment, accompanied Azure YAML pipeline and releases
  - Aided in building data ingestion pipeline capable of ingesting/supplementing/storing ~4 Million documents daily
  - Designed/Built/Released asynchronous event based worker encompassing start/stop/complete/heartbeat events
  - Designed/Built different backend endpoints for frontend/API calls
  - o Prototyped different MVPs for different backend SAQR features
  - o Created python packages (hosted on Azure Artifacts) and publishing pipeline for one of SAQR's components
  - Deployed/Managed two onpremise swarm deployments of the SAQR Platform
  - o Developed/Integrated modular code for aggregation and grouping for Solr into pipeline
  - o Integrated in-house Unsupervised User Stance Detection on Twitter into production
  - Added different crawler modes with state support using Redis
  - o Modified open source libraries to achieve multi-language (JS, Python) support between our microservices
  - o Introduced different Azure Devops features to aid developers in development process

Sijil — Python, Flask, MySQL, Docker, Swarm

- Designed/Developed different aspects of the log analysis backend API
- $\circ\,$  Flask: Built endpoints for data and aggregations using SQL and Mongo
- $\circ~$  Built queries for aggragations/selections for Mongo/SQL

Hemaya — Python, Flask, Redis, MongoDB, Docker

- $\circ \ \ Designed/Developed \ scalable \ pipeline \ for \ collection, \ aggregation, \ enrichment \ and \ storage \ of \ IPs$
- o Pipeline able to ingest 1 Million IPs across 15 Ports/Protocols
- $\circ\:$  Developed backend API for storage and querying of aggregated data using Flask
- Used micro-service architecture to split and connect components within pipeline using Docker and Redis

Qatar University

Doha, Qatar

Research Assistant

Setup multiple MPC and 2PC platforms including Obliv-C, ObliVM, CMBC-GC and TinyGarble.

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• Wrote scripts/programs to be used in platforms to run comparisons.

## Carnegie Mellon University in Qatar

Doha, Qatar January 2017 - April 2017

Research Associate

• Setup & benchmarked 4 state-of-the-art parallel/distributed graph analytics platforms on a 40-node cluster: GraphPad (Distributed GraphMat), Graphlab PowerGraph, GraphX (on Spark) and Giraph.

- Deployed Hadoop (v1 & v2), including HDFS, MapReduce, and YARN (for Giraph and GraphX).
- Evaluated several common graph analytics application benchmarks on multiple real-world big data graphs: incl. Wikipedia (50 million edges), Weibo (250 million edges), Twitter (1.5 billion edges).
- o Paper: LA3: A Scalable Link- and Locality-Aware Linear Algebra-Based Graph Analytics System.

## **Qatar Computing Research Institute**

Doha, Qatar