Samer Makary

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Toronto, Canada

Professional Profile

Software engineer with demonstrated expertise in location-based, data-mobilization, and back-end systems development utilizing various frameworks and technologies.

Experience

- **Amazon.com, Inc.** — Toronto, Canada
  Software Development Engineer — *Jan 2020 - Present*
  - **Fenix**: Amazon is an online retail platform that provides several services.
    Participate in implementation, monitoring, and troubleshooting/bug-fixing of several components of Amazon's Sponsored Products Ad-serving service. Utilizing **Java** and **Spring MVC**.

- **Webalo, Inc.** — Los Angeles, USA – Alexandria, Egypt
  Software Engineer — *Jul 2016 - Jan 2020*
  - **HTML Toolkit**: Webalo provides a platform for no-code mobilization of heterogeneous enterprise data sources.
    Participate in design and architecture specification of a new HTML-based platform-agnostic UI widget rendering toolkit.
    Led a team of engineers to develop and migrate Webalo's User Agent applications to the new toolkit and retire the Java Canvas-based toolkit. Utilizing **Java**, **Angular**, and **Bootstrap**.
  - **Unit & Integration testing**: Spearhead the effort to setup and design system testing framework for developing integration tests.
    Utilizing **TestNG** and **Mockito** for module testing and **Selenium** for end-to-end testing.
    Automate system build and testing through **Jenkins**.

- **Coptic Academy, NGO** — Remote
  Part-time Back-end Engineer — *May 2017 - Oct 2018*
  - **CPlanner**: Maintain RESTful data-serving back-end for Coptic Planner mobile app. Responsibilities include REST API extension using **Spring Boot** and Hibernate, deployment to production server and bug troubleshooting/fixing. Optimization of back-end operations and SQL queries.
  - **CMentor**: Setup, design, and implement RESTful back-end for Coptic Mentor mobile app using **Spring Boot** and Hibernate.
  - **Batch-processor**: Design and implement data batch-processor driven by cron jobs for consuming system data, via optimized SQL queries, and delivering custom notification in **Java** and shell scripts.

- **Google, Inc.** — Mountain View, CA
  Software Engineering Intern — *Aug 2015 - Nov 2015*
  - **Sandlot**: As part of the G-Tech team, integrated sentiment prediction into Google's partners management tool.
    Responsible for the design and implementation of the new feature using **Python** and **AngularJS**.

- **Wireless Stars, LLC** — Indonesia – Egypt
  Software Engineer — *Oct 2013 - May 2015*
  - **ARTS**: System for road traffic estimation based on user cell-phone data analytics. Building **Android** SDK for location and sensor data collection.
    Collaborating with research team on developing production ready algorithms and modules for data processing back-end system using **Java Spring Boot** and data pipeline through Apache Camel.
    Responsible for implementation and testing of **Kalman-filter** user speed estimator.
    Utilizing PostGIS to implement spatial queries consumed by various modules of the system.
    Implement **Android** app that uses traffic SDK to push data to the back-end and query the system to estimated traffic state. The application was used by business team for demo/presentation and by the research team for system evaluation.
  - **EYE360**: Augmented reality application providing bi-directional user interaction built using **Unity3D** and Qualcomm Vuforia SDK

- **Alexandria University** — Alexandria, Egypt
  Teaching Assistant — *Sep 2012 - Jan 2013*
    - **In Special Scientific Program (SSP)**: Teaching Introduction to Databases and Numerical Analysis courses.

- **Innuva, IT** — Alexandria, Egypt
  Game Developer Trainee — *Jul 2011 - Oct 2011*
    - **3D shooting game**: Game design and implementation using **Unity3d** game engine. The game logic is being implemented using JavaScript for Unity3d.

Tools & Frameworks [1]

- **Languages**: Java – Python – TypeScript – SQL
- **Frameworks**: Spring MVC/Boot – Angular 7 – Jenkins – Unity3D – AngularJS (1 & 2) – Android
- **Testing**: TestNG – Selenium – Mockito/PowerMock – Jasmine/Karma

Education

- **Alexandria University, Faculty of Engineering** — Egypt
  B.Sc. Computer and Systems Engineering GPA: 3.49 / 4.0 — *Sep 2007 – Jul 2012*

Continuous Education [2]

- **Programming Languages**: Coursera - Washington Uni
- **Introduction to Functional Programming in Scala**: Coursera
- **Applied Cryptography**: Udacity
- **Introduction to Cryptography**: Coursera - Stanford
- **Introduction to Recommender Systems**: Coursera - Uni of Minnesota
- **Algorithms Design and Analysis**: Coursera - Stanford
- **CSMM.102x Machine Learning**: Edx - ColumbiaX
- **CSMM.101x Artificial Intelligence**: Edx - ColumbiaX
- **Introduction to AI for Robotics**: Udacity
- **Machine Learning**: Coursera
- **Coding the Matrix**: Coursera
- **Scalable Machine Learning**: Edx

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[1] Technologies are listed in decreasing order of experience.

[2] Certificates are available upon request.