Samer Samy Makary

https://github.com/samer-makary

samer.samy.nazzir@gmail.com

Los Angeles, CA

EDUCATION

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

EXPERIENCE

- **Webalo** — Los Angeles, CA – Alexandria, Egypt
  Software Engineer — *Jul 2016 - Present*
  - **System design and implementation**: Webalo provides a platform for no-code mobilization of heterogeneous enterprise data sources.
    Participate in leading, design, implementation and troubleshooting of various system features.
    Utilizing **Java** among other technologies.
  - **Unit & Integration Testing**: Spearheaded the effort to setup and design system testing frameworks for developing integration tests.
    Utilizing **TestNG** and **Mockito** for module testing and **Selenium** for end-to-end testing.
    Automated 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 a POC of 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** — 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** — 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.
    Assist in the developing of back-end data processing system using **Java Spring Boot** and data pipeline through Apache Camel.
  - **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 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.

ONLINE COURSES

- **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

ACADEMIC PROJECTS

- **Documents Clustering with Semantics-based Similarity** – [Java]
  Developing a Semantic-based similarity metric for Arabic documents. The approach was then used for clustering news articles using different clustering algorithms like DBSCAN and Mitosis.

- **Split TCP** – [Java]
  Implementing Split TCP protocol for wireless ad-hoc networks to improve performance.

- **eVoting System** – [C++ over Linux]
  Implementing the principles of the Application Layer HTTP client/server requests using Socket connection over TCP and UDP.

- **Machine Learning** – [MATLAB]
  Implementing techniques and algorithms like Linear and Logistic Regression, Neural Networks, K-Means clustering, and Gaussian anomaly detection.