

Khalid Alnuaim

Research interests

Big Data, Distributed processing, Data analytics and Scalable time series.

Experience

Graduate Teaching Assistant

Worcester Polytechnic Institute

August 2021 – Present

Assist students in the graduate course "Design of Software Systems". In addition to grading students' assignments and projects.

Solution Architect

Saudi Authority for Intellectual Property

November 2019 – January 2021

Stabilized the authority's portal and optimized the performance and security. Designed and implemented in-house solutions. Provided consultation and support for other teams and developers in the authority.

Software Engineer

King Faisal Specialist Hospital and Research Centre

November 2013 – November 2019

Developed applications for different platforms: Web applications using JavaServer Faces, console applications using Java and iOS applications using Objective-C.

Software Engineer Intern

RVEALR

February 2018 – May 2018

Prototyped a client dashboard and REST API back-end, with multiple views and functionalities, to allow the client to manage and monitor the resources.

Software Engineer Intern

TURBO Studios

September 2017 – January 2018

Developed a connection to AWS in a supporting tool (Admin Tools) which perform multiple AWS related actions. In addition to Improving and fixing bugs in Spring Framework back-end system.

Software Engineer Intern

King Faisal Specialist Hospital and Research Centre

June 2012 – August 2012

Enhanced Emergency Management System (EMS) by adding administrative features to allow the administrator to configure and set up the emergency unit.

Education

Worcester Polytechnic Institute

Ph.D. In Computer Science (2021 – 2025)

Stevens Institute of Technology

M.S. In Computer Science (2017 – 2018)

Imam University

B.S. In Computer Science (2008 – 2013)

Awards & Achievements

Winner Best Hack Using a NYC API

HackNY Hackathon Spring 2017

Intel, MongoDB, Twilio and others

<https://devpost.com/software/mansplaintome>

Winner Most Original Project

DuckHacks Hackathon 2017

Google and JPMorgan Chase & Co.

<https://devpost.com/software/duckhacks-share-your-taste>

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LinkedIn <https://www.linkedin.com/in/khalidalnuaim/>

Projects

Sehaty (My Health)

King Faisal Specialist Hospital and Research Centre

Developed the official iOS application for King Faisal Specialist Hospital and Research Centre's patients. Worked as the lead developer; developed all app views that retrieve the user's data from a backend database. In addition, managed the user's session and implemented some of the iOS 10 SDK features such as: LocalAuthentication, UserNotifications, HealthKit and EventKit.

Healthy Lifestyle

King Faisal Specialist Hospital and Research Centre

Created a health tracking application for KFSHRC's patients so they be monitored remotely by their physician. In addition, created a REST API to store all the data using Java. Also, developed the controller inside the official iOS app "Sehaty" which interacts with both the REST API and the iOS HealthKit.

Various Big Data analytics projects

Developed many MapReduce jobs for massive datasets on HDFS to perform spatial join, detecting outlier based on distance, and performing K-Means clustering. Also developed many Spark workflows to perform indexing of high relative density of grid cells, generating the Frequent Pattern Mining using the Apriori algorithm and producing progressive approximate answers for aggregation queries. In addition to creating a variety of Apache Pig queries and Apache Hive scripts.

Various full-stack development projects

Developed many full-stack projects for different areas (Healthcare, Education, Social, and others) using multiple technologies for front-end like React, Vue.js, JQuery, and Vanilla JS. And multiple technologies for back-end like Spring Boot, Express.js, and Flask. That interacts with different data sources like SQL, NoSQL, REST API, and GraphQL. And communicate with other services like ActiveMQ Artemis and Keycloak.

More projects <https://kalua.im/projects/>

Certificates

Advanced Study in Software Construction

Massachusetts Institute of Technology

<http://web.mit.edu/6.031/www/fa19/>

React Nanodegree

Udacity

<https://confirm.udacity.com/563VRG2S>

A developer's guide to the Internet of Things (IoT)

Coursera (9J6KF7RTGT3H)

<https://www.coursera.org/account/accomplishments/verify/9J6KF7RTGT3H>

Red Hat Certified System Administrator

Red Hat (140-006-149)

<https://www.redhat.com/rhapps/certification/verify/?certId=140-006-149>

Skills

Languages Java, Python, JavaScript, Scala, Objective-C

Frameworks Express.js, Spring Boot, Flask

Frontend React, Vue, HTML5, CSS3, jQuery

Infrastructure SQL (PostgreSQL), NoSQL (MongoDB), Redis

Hadoop, Spark, Pig, Hive

AI / ML Scikit-Learn, TensorFlow, PyTorch

CI / CD Git, Jenkins, Docker

Cloud AWS



For latest digital copy

<https://kalua.im/resume/>

Version 2021.12.001 (09-12-2021)