Rakan Alanazi

Email: a.rakan@outlook.com
Faculty of Computing and Information Technology,
Northern Border University,
Rafha, Kingdom of Saudi Arabia.

EDUCATION

UNIVERSITY OF MISSOURI-KANSAS CITY   Kansas City, MO
Doctor of Philosophy in Computer Science   August 2017 – May 2021

UNIVERSITY OF MISSOURI-KANSAS CITY   Kansas City, MO
Master of Science in Computer Science   August 2015 – Dec 2016

- Overall GPA: 3.64 / 4

NORTHERN BORDER UNIVERSITY   Rafha, Saudi Arabia
Bachelor of Science in Information Technology   August 2008 – June 2012

- Overall GPA: 4.76 / 5
- First-Class Honours

EXPERIENCE

SOFTWARE DEVELOPER   Kansas City, MO
University of Missouri Kansas City, Computer Science Department   December 2019 – June 2020

- **CodEx:**

An enhancement version of Code2Graph. CodEx is an interactive, web-based visualization tool that enables a top-down and bottom-up analysis of a system and its execution paths for an enhanced program comprehension experience. The tool implements the execution path mining along with the visualization aspects. It can automatically analyze the source file of a system and construct the static call graph for a system. Then, cluster the execution paths of the call graph into hierarchical abstractions.

SOFTWARE DEVELOPER   Kansas City, MO
University of Missouri Kansas City, Computer Science Department   December 2019

- **Medl.Ai:**

A web-based collaborative platform and repository to easily explore, share, reuse, and run deep learning models specific for medical applications. It automated the inference function for the deep learning models in Python

SOFTWARE DEVELOPER   Kansas City, MO
University of Missouri Kansas City, Computer Science Department   June 2019

- **ModelKB:**

A framework that automates the management of the modelling life cycle in deep learning.

SOFTWARE DEVELOPER   Kansas City, MO

University of Missouri Kansas City, Computer Science Department   December 2018

- **Code2Graph:**

Python static analysis tool that analyzes the source code of programs written in Python. The tool can automatically analyze and extract the system structure. Then, construct the static call graph of the system. Finally, construct similarity matrix of all possible execution paths in the system.

SOFTWARE ARCHITECT   Kansas City, MO

University of Missouri Kansas City, Computer Science Department   Summer 2016

- Create full-feature architecture model of open-source system and refactor the source code to match the architecture.

SOFTWARE ARCHITECT   Kansas City, MO

University of Missouri Kansas City, Computer Science Department   Spring 2016

- Recover and create architecture model of exiting open-source system that has around 200K SLOC

SOFTWARE DEVELOPER   Rafha, Saudi Arabia

Northern Border University, Information Technology Department   February 2013 – April 2013

University Course Management System:
- Manage courses, classrooms and events
- Avoiding scheduling conflicts
- Paying special attention to dates and times of lectures and exam sessions.

SOFTWARE DEVELOPER   Rafha, Saudi Arabia

Northern Border University, Information Technology Department   August 2012 – December 2012

University Store Management System (USMS):
- Managed and maintained records of warehouses and staff of (NBU)

RESEARCH INTERESTS

- Software Architecture and Design.
- Reverse Engineering
- Data Analysis
- Software and Data Visualization
- Machine Learning