Khadijah Al Safwan, Ph.D.

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🎓 EDUCATION

Ph.D. in Computer Science	GPA:	3.93/4	Virginia Tech | 2018 - 2023
M.S. in Computer Science	GPA:	3.90/4	Virginia Tech | 2016 - 2018
B.S. in Computer Science	GPA:	4.71/5	University of Dammam | 2011 - 2015

💼 WORK EXPERIENCE

Instructor of Record	Virginia Tech | 2021, 2022, 2023
Graduate Teaching Assistant	Virginia Tech | 2019 - 2023
Graduate Research Assistant	Virginia Tech | Fall 2018 and Summer 2021
Researcher	University of Dammam | 2014 - 2015
COOP Trainee	Wipro Arabia Limited | Summer 2014
Administrative-Work Assistant	University of Dammam | Oct - Dec 2013
Summer Trainee	Saudi Aramco | Summer 2013

📖 PUBLICATIONS

Developers' Need for the Rationale of Code Commits: An In-breadth and In-depth Study	JSS | 2022
Decomposing the Rationale of Code Commits: The Software Developers' Perspective	ESEC/FSE | 2019
Design and Implementation of a Residential Energy Monitoring System Prototype	IJCDS | 2016
iTrack: A Residential Energy Monitoring System Tailored to Meet Local Needs	EConf | 2015

💻 SKILLS

Programming Languages

| Expert level	CSS · HTML · Java · SQL
| Proficient level	PHP · JavaScript · JQuery · Python
| Competent level	NodeJs · Prolog
| Novice level	ABAP · ASP.NET · C++ · C · Lisp · Scheme

Data Management and Analysis

| Warehousing and management systems	MySQL · PostgreSQL · Apache Solr · MongoDB
| Apps and tools	MySQL Workbench · Studio 3T · SPSS · Microsoft SQL Server · R · Mathematica
| Machine learning libraries	Pandas · NumPy · SciKit-Learn · SciPy

Server Management

| Operating systems/services	Mac OS · Ubuntu Linux · Amazon Web Service · Windows · Raspberry Pi
| Servers	Apache · Nginx · VNC · Passenger
| Access and control tools	Secure Shell (SSH) · Docker · CPanel

Visualization and Graphic Design

Data visualization	D3 · Plotly · Processing · Tableau
Graphic design, diagramming, and illustration	Lucidchart · Adobe Lightroom · Adobe Illustrator
Simulation	Circuit Maker · MatLab · National Instruments · Packet Tracer
UI design	Adobe Dreamweaver · Axure · Balsamiq Wireframes

Office and Writing
Google Workspace · LaTeX · Microsoft Office · Qualtrics

Spoken Languages
Arabic · English

⚙ RECENT PROJECTS

GitHub Pull Requests Prediction Tool	2022
Identifying Racial Microaggressions in Social Media	2022
An Empirical Study of GitHub Pull Requests	2021
Continuous Integration (CI) Human Study	2021
An Empirical Study of Rationale Discussions	2019
Developers' Need for Rationale	2018 - 2022

🏆 SELECTED AWARDS

Recognitions

Graduate Teaching Assistant of the Year	Virginia Tech	2020 Academic Year
Annual Excellence Award	University of Dammam	2012, 2013, 2014, 2015

Scholarships/Assistantships

Graduate Studies Scholarship	Saudi Arabian Cultural Mission (SACM)	2016 - 2018

👥 RECENT ACTIVITIES & SERVICES

Reviewer

Transactions on Software Engineering (TSE) Journal	TSE 2023	2023
Mining Software Repositories (MSR) Junior Program Committee (PC)	MSR 2023	2023
International Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE) Program Committee (PC)	RAISE 2021	2021
Mining Software Repositories (MSR) Shadow Program Committee (PC)	MSR 2021	2021

Member

Center for Integration of Research, Teaching, and Learning Advisory Board	Virginia Tech	2023
CS Department Teaching Apprenticeship Program	Virginia Tech	2023
Graduate Honor System (GHS) Chair Selection Committee	Virginia Tech GHS	2022

Research Mentor
Virginia Tech | Summer 2021, 2019, 2017

Volunteer

Research Lab Representative	Virginia Tech	2019 - 2023
Innovative Technology Experiences Project (NSF ITEST)	VT PEERS	2018 - 2019