SALEM ALQAHTANI

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Education

State University of New York(SUNY) at Buffalo

Ph.D. in Computer Science and Engineering

Buffalo, NY

Jan. 2017 - August 2022

University of Connecticut

M.S. in Computer Science and Engineering

Jan. 2014 - May 2015

King Khalid University

August. 2005 - Jun 2010

Abha, KSA

Storrs, CT

B.S. in Computer Science

Relevant Coursework

• Distributed Systems

• Data Structures

• Algorithms Analysis

• Database Management

• Machine Learning

• Operating Systems

• Systems Programming

• Computer Architecture

Experience

University of Utah

May 2024 - September 2024 Research Intern Salt Lake, Utah

Planning to develop a data fabric framework that seamlessly collects and integrates data from diverse sources.

SUNY at Buffalo

September 2022 - May 2024

Postdoctoral Researcher

Buffalo, NY

• Led the Juicer project, which involved developing an ordering layer to enhance concurrency control performance in distributed databases. Utilized CockroachDB System as the baseline and integrated this layer as an interceptor within the GRPC layer. This facilitated efficient transaction reordering, resulting in minimized abort rates and improved overall system efficiency.

SUNY at Buffalo

Jan 2017 - August 2022

Research Assistant

Buffalo, NY

- Led a project that designed a new BFT protocol called BunchBFT for better performance in Geo-Distributed settings.
- Led a project that designed a new BFT protocol called BigBFT for high throughput, which resulted in a publication in IEEE-IPCCC '21.
- Led a project that fundamentally studied the bottleneck in Blockchain protocols and designed an implementation framework called PaxiBFT for system evaluation, which resulted in a publication in IEEE-COINS '21.
- Led a project that studied and evaluated the communication topologies in machine learning systems, which resulted in a publication in IEEE-ICCCN '19.
- Collaborated on a project that studied and evaluated machine learning systems, which resulted in a publication in IEEE-ICCCN '17.

King Khalid University

May 2010 - August 2011

Lecturer

Abha. KSA

- Designed and developed course materials, assignments, and assessments for the Data Structures and Algorithms course, aimed at enhancing student learning outcomes.
- Actively participated in departmental meetings, providing insights and contributing to the ongoing curriculum development and improvement initiatives.

Saudi Aramco

May 2009 - August 2009

Front End Developer Intern

Dhahran, KSA

• Contributed to the frontend development of a web application designed to sort and organize data collected from the field.

Technical Skills

Languages: Python, Java, C, C++, Golang, HTML/CSS, JavaScript, SQL

Developer Tools: VS Code, Eclipse, Google Cloud Platform, Android Studio, AWS

Technologies/Frameworks: Linux, GitHub

Leadership / Extracurricular

Fraternity

Spring 2020 - Fall 2020

State University of New York

• Lead and establish a Saudi Club in the Graduate Student Association.

President