ROHAIL ASIM

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EDUCATION

PhD in Computer Science, New York University

Expected 2025

Relevant Coursework: Advanced Algorithms, Advanced Database Systems, Distributed Systems

CGPA: 3.92

Bachelor of Computer Science, Lahore University of Management Science (LUMS)

2015 - 2019

Relevant Coursework: Network Centric Computing, Distributed Systems, Network Security, Advanced Programming, Software Engineering, Computer Graphics, Artificial Intelligence, Databases, Algorithms, Data Structures

CGPA: 3.70 (Graduated with Distinction)

EXPERIENCE

Graduate Research Assistant

Sep 2020 - Present

New York University

New York, USA

- Conducted a comprehensive study on the impact of generative AI on educational institutions
- Implemented a TCP-based network Congestion Control (CC) protocol in <u>C</u>, for <u>VR/AR</u> applications, that uses an unsupervised ML approach to outperform current protocols by up to 80%
- Developed a framework for the evaluation of CC algorithms in <u>next-generation network</u> environments, using tools like <u>Mahimahi</u> and <u>NS-3</u>, in a repeatable and reproducible manner

Software Engineer (Full Stack)

Jan 2020 - Aug 2020

Educative Inc.

Lahore, PAK

Educative is an ed-tech platform with over 2 million users that provides interactive and adaptive courses for software developers

- Migrated platform to Next.js to utilize server-side rendering (SSR) and client-side caching to drastically improve page load times and SEO
- Created a Design System using <u>Material-UI</u> in <u>TypeScript</u> saving up to 50% of a developer's time to build UI components
- Increased test coverage to 70% (from 25%) using a testing infrastructure based on <u>Jest</u>, <u>Unittest</u>, and <u>Selenium</u>

Research Assistant

June 2019 - Dec 2019

Technology for People Initiative (TPI) - LUMS

Lahore, PAK

- Trained an <u>ML</u> model for OLX, a global online marketplace, to analyze consumer behavior and isolate patterns unique to serious buyers
- Worked with Mobilink Jazz, a leading mobile network operator in Pakistan, to model and understand urban mobility patterns in Pakistan using Call Detail Record (CDR) data

RELEVANT PUBLICATIONS

- [1] Impact of Congestion Control on Mixed Reality Applications. Proceedings of the 2024 SIGCOMM Workshop on Emerging Multimedia Systems
- [2] SONIC: Connect the Unconnected via FM Radio & SMS. Proceedings of the 20th International Conference on emerging Networking EXperiments and Technologies

SKILLS

Coding Languages Spoken Language Python, C, C++, JavaScript, TypeScript, GoLang, HTML, CSS, Matlab, MySQL

English (C2), French (A1), Urdu (C1)