

SYED MUHAMMAD ALI NAWAZISH

+923336844315 ◊ ali.nawazish94@gmail.com ◊ <https://www.linkedin.com/in/ali-nawazish-b18b98177>

EDUCATION

Lahore University of Management Sciences

September 2018 - July 2020

Masters in Computer Science; CGPA: 3.67

Relevant Courses: Distributed Systems, Design and Analysis of Algorithms, Computer Vision, Network Security and Internet of Things

COMSATS, Lahore

February 2013 - June 2017

Bachelors in Software Engineering; CGPA: 3.4

Relevant Courses: Data Structures, Algorithms, Object Oriented Programming, Databases, Web Technologies, Data Mining and Data Warehousing

EXPERIENCE

Zong Research Lab - Lahore University of Management Sciences February 2019 - Present

Research Assistant

- Encoded cellular messages with **ASN.1** serialization to perform comparative analysis against a new serialization scheme – **FlatBuffers**.
- Designed a fast packet processing system leveraging **Intel's fifth generation** user plane functions and improved the user-perceived latencies by up to **10x**.

COMSATS, Lahore

October 2017 - August 2018

Ruby on Rails Engineer

- Developed a **web-based** automatic programming assignment assessment system for **C/C++**, and tested it with **real** course assignments.
- Designed and developed a **plagiarism detection** module in Ruby language for university assignments using a novel **string matching** algorithm.
- Designed and developed a **graph-based semantic similarity** module in Ruby language for finding structural similarity of C/C++ source codes using **clang** compiler APIs.

PROJECTS

- **Cellular Security:** Developed an **autoencoder-based neural network** for detecting anomalous cellular traffic. The pipeline performs spatio-temporal analysis and is able to achieve up to **93%** f-score.
- **Panorama Generator:** Developed an Android and web-based solution for panoramic pictures creation using Computer Vision concepts.
- **Bitcoin Miner:** Developed a distributed system that mimics the **bitcoin's** mining algorithm.
- **Paxos:** Developed a fault-tolerant, distributed algorithm for reaching consensus in distributed systems using Golang.
- **OLAP Cube:** Created an approach for multi-dimensional data analysis using a Java-based automatic query builder.

TECHNICAL SKILLS

- **Programming Languages:** Python, Ruby, Java, C/C++, Golang and Javascript
- **Frameworks/Libraries:** Ruby on Rails, Flask, Laravel, OpenCV, Keras, Scikit and DPDK

HONORS AND AWARDS

- Participated in DICE competition at COMSATS Sahiwal, 2016
- Participated in DICE competition at COMSATS Lahore, 2017