

# Muhammad Matloob Altaf

Mobile: +92 3404609424; matloob.altaf@outlook.com; Lahore, Pakistan  
<https://www.linkedin.com/in/matloobaltaf/>

## EDUCATION

### Lahore University of Management Sciences

June 2017 - June 2021

BS (Computer Science)

*Relevant Courses:* Data structures, Algorithms, Computer Architecture, Operating Systems, Software Engineering, Network Security, and Distributed Systems

## EXPERIENCE

### Conrad Labs

Software Engineer

May 2021 - Present

- Worked as a full-stack engineer on yieldwerx, responsible for developing software to analyze testing data of 4 billion microchips per annum
- Developed a statistical process control system to identify trends and potential anomalies in testing data
- Improved the design and functionality of the software, resulting in a 25% cost savings for clients
- Collaborated with the team to optimize code and improve the overall performance of the software
- Assisted with the successful alpha launch of the software, including providing support to clients during the onboarding process
- Provided training and guidance to new employees on the use, development, and maintenance of the software.

### Open Data Pakistan

Software Engineer Intern

June 2020 - June 2021

- Worked as a software engineer on the Open Data Portal team, responsible for developing and maintaining the CKAN platform
- Conducted research and development to identify and implement new features and improvements to the platform
- Collaborated with team members to troubleshoot and resolve technical issues
- Contributed to the successful growth and maintenance of the Open Data Portal, enabling the dissemination of open data to a wider audience.

## PROJECTS

- YieldWerx, a modular semiconductor test data analytics solution
- Mini line following Robot using Arduino Uno, IR, and Ultrasonic Sensors
- E-commerce store for a clothing brand with sentiment analysis systems using Python Django-stack, Bootstrap CSS, JavaScript, and PostgreSQL
- Naive Maze Solver using Genetic Algorithms
- Airline Database Management System using Python (Tkinter library) & MySQL Server
- Kernel modules, process synchronization, and memory management for Linux using C language
- Speaker and Gender Recognition System using Python (Keras)
- A multi-camera system for traffic management and security using live CCTV footage and Python (OpenCV)
- Haven - an anonymous, end-to-end encrypted mental health chat application for the LUMS community

## ADDITIONAL SKILLS AND EXPERIENCE

- Proficient in C++, .Net, Python, and JavaScript
- Strong understanding of data structures and algorithms
- Experience with agile development methodologies
- Strong problem-solving and communication skills

- Familiar with various software development tools, including Git and JIRA
- Experience with full-stack development and a variety of technologies, including React, TypeScript, .NET, Node.js, Django, Bootstrap, and JavaScript
- Proficient in hardware development, with experience building a mini line-following robot using Arduino Uno, IR, and ultrasonic sensors
- Experienced in machine learning, with projects including a speaker and gender recognition system using Python and Keras, and a multi-camera system for traffic management and security using live CCTV footage and Python's OpenCV library

## HONOURS AND AWARDS

- **First Runner-Up Award in Robotics Competition** held by SBASSE in Fall 2017 among a total of about 500 students.
- **Best Speaker Award** in Inter School Games in 2015

## INTERESTS

- Sports
- Literature

## EXTRA CURRICULAR

- **STEM Educator @ Harsukh:** I taught Mathematics and Science to underprivileged students under civic engagement and service learning.
- **Communications Head @ Hostel Life Fellows (HLFs),** an External Committee of LUMS Student Council: I was responsible for planning, communicating and overseeing the execution of events.
- **Director of Logistics @ LUMS Culture Society:** I was responsible for providing logistical help to organize events, national and international trips.
- Active Member of LUMS Community Service Society (LCSS)