

Hassan Azhar

| +92 333 5351533 | hassanazhar1999@gmail.com | <https://github.com/hassazhar> |

EDUCATION

Lahore University of Management Sciences

BS Computer Science

Lahore

August 2017 – May 2021

- Overall CGPA: 3.54/4.00 — Computer Science Subject CGPA: 3.73/4.00

EXPERIENCE

Software Engineer

Retailo

August 2022 – Present

Lahore

- Revamped application authentication services by implementing OTP and Force-logout.
- Refactored Monolithic APIs into MicroServices architecture.
- Implemented Squad's repositories' move from Gitlab to Github by setting up CI/CD pipelines and Repository mirroring.

Software Engineer

Educative.io

October 2021 – July 2022

Lahore

- Implemented Artificial Intelligence in Educative's Skill Assessments using Computerised-Adaptive Testing.
- Improved website performance by reducing vital data load time by 50% and improving web vitals scores.
- Completed large refactors to remove unnecessary packages and reduce bundle size.
- Performed thorough code reviews to maintain code-base quality and readability.

Software Engineer - Future Innovators Program

Telenor Microfinance Bank

July 2021 – September 2021

Islamabad

- Completed a comprehensive training plan to become a well-versed Android Developer in Kotlin and Java.
- Developed UI and frontend code-base for nationally acclaimed microfinance platform, Easypaisa.
- Worked alongside various teams to ensure timely delivery of code following extensive testing.

Developer Advocate Intern

Educative.io

June 2020 – August 2020

Lahore

- Wrote 100+ educational tutorials on Computer Science-related topics.
- Distilled relevant information for short to-the-point articles.
- Learnt about server and big data technologies, database and virtualization tools, and techniques related to software development, artificial intelligence, and other computer science disciplines.

Software Development Intern

ExdNow

June 2019 – August 2019

Lahore

- Worked alongside experienced software developers and marketing experts during the six-week internship.
- Learnt app-development for Android devices and Apple iPhones and web-development.
- Worked on Android and iPhone applications and developed a website.

TECHNICAL SKILLS AND OTHER INTERESTS

Languages: C/C++, Python, JavaScript, TypeScript, Java, Kotlin, Dart, Golang, Haskell, Matlab, MySQL

Frameworks: React, Flutter, Tailwind, TypeORM, Node.js **CI/CD:** Github Actions, Jenkins

Cloud Services: Google Cloud Platform, Amazon Web Services

Graphics: Unreal Engine 4, OpenGL **Developer Tools:** Git

Other Interests: History, Anthropology, Fine Arts, Films, Sports, Music Theory, Physical Fitness

UNIVERSITY PROJECTS

Senior Year Project (2020-2021): Mining Data from Pay-Per-Install Applications

Project Goal: Collect data from Pay-Per-Install Applications and analyze it.

Project Description: In this collaborative project with a PhD candidate the University of Iowa, I wrote several app crawlers and set up alongside a Man-In-The-Middle proxy to intercept data. I deployed a data collection system to a remote server. I coded and deployed a Google Play Store crawler to routinely survey apps found on Pay-Per-Install offer-walls. Finally, the collected data was analyzed and visualized using Data Mining and Machine Learning methodologies.

Project Results: The visualization and analysis of the data was submitted to and approved by Senior Year Project advisor in May 2021.

Directed Coursework (2020): Online Education Engagement, Learning, and Perception

Project Goal: Studying the effects of the switch to online education on learning and retention.

Project Description: This research project aimed to survey online education systems and tools employed by schools in Pakistan to provide education during the COVID 19 lockdown. A team of researchers and I conducted Interviews with both students and teachers, regarding the usage and subsequent challenges of remote learning tools. I, along with my team, qualitatively analyzed data to extract meaningful information to benefit future designs of education applications.

Project Results: A thorough research paper outlining major findings with analysis was drafted in December 2020.

Human-Computer Interaction Course Project (2020): Designing to Prevent Sexual Harassment in Children in Pakistan

Project Goal: Designing a solution to tackle sexual harassment in children through education.

Project Description: There is a severe lack of sex education in Pakistan, owing to its perception as a taboo topic. As a theorized consequence, a large amount of sexual harassment and other related crimes take place regularly and remain unreported, especially in children. In this project, my team and I designed, prototyped and tested a gamified solution, aimed at children, to counter this issue by teaching children the basics of “good touch and bad touch.”

Project Results: A research paper was drafted in December 2020.

Software Engineering Course Project (2020): Swole Spartan mobile application

Project Goal: Designing and developing a mobile platform for fitness startup, Swole Spartan.

Project Description: An Android application was to be developed with an online store, a videos section, and a forum. I found a client for this project and along with my team, completed all the required documentation. The team and I developed the application in Flutter to ease a possible future port to iOS. I designed the backend of the application using Google’s Firebase database.

Project Results: A fully functional prototype application was developed with a visually attractive and easy-to-use UI.

HONORS AND AWARDS

- Placed on the Dean’s Honor List in Fall 2017, Spring 2020 and Fall 2020.
- Awarded the Roots High Achievers Award in 2015, 2016 and 2017.

EXTRA CURRICULAR

Vice President of Psychology/Director IT/Member Publicity

2020/21, 2019/20, 2018/19

Psychology at LUMS

Lahore

- Having remained a member of the Publicity department and Director of IT for academic years 2018/19 and 2019/20, respectively, I was selected as the Vice President of the Psychology at LUMS student society for the 2020/21 academic year. The society aims to improve mental health awareness at the university and work to reduce stress and other mental health problems students face on campus through activities and sessions. My role in the society spanned from long-term planning and event management to leading the general body of the society and communicating with external speakers and sponsors to make sure their needs and requirements are fulfilled.

Member Logistics/Member Productions

2018/19, 2019/20

2020/21

Music Society of LUMS

Lahore

- Between 2018 and 2021, I remained an active member of The Music Society of LUMS as part of the Logistics and Productions departments, promoting Luminite musicians and appreciation of the arts on campus. My contributions to the society involved ensuring both administrative and internal requirements are met for events and concerts and later on, handling the technical aspects such as the sound equalization in concerts and society productions.