

## EDUCATION

**Lahore University of Management Sciences (LUMS) – BS Computer Science**

**2020 – 2024**

Relevant Courses: *Algorithms, Databases, Software Engineering, Distributed Systems, Blockchain, Operating Systems, Computer Architecture, Machine Learning, Artificial intelligence, Data Science.*

## EXPERIENCE

**Sehat-Sanjha - Software Engineer - Part Time**

**July 2023 – Present**

- [Sehat Sanjha](#) is a health-care startup using ML to provide a physician's assistant to improve the health care experience digitally by leveraging 100M+ mobile users in Pakistan.
- Despite being the only student in a team of 3 developers, I have introduced numerous features such as event tracking, setting up proxy server, developing landing pages and UI enhancements for physician facing webapp.
- **Technologies:** *Typescript, React, Redux toolkit, MaterialUI, GraphQL, Apollo Server, Mixpanel, DynamoDb, AWS lambda, Serverless, React-testing-library, Jest.*

**Bookme.pk - Software Engineer - Internship**

**June 2023 – Aug 2023**



- [Bookme.pk](#) is Pakistan's largest online ticket selling platform that was able to secure \$7.5 million in Series-A funding round.
- I contributed to airline vertical and made a *Data Mapper* which maps JSON data from different airlines' API into a unified format to be displayed on frontend.
- **Technologies:** *VueJs/NuxtJS, PHP, Laravel, JSON-server.*

**Center for Speech and Language Tech. (CSaLT) - Web Developer - Part Time**

**Jan 2023 – May 2023**

- [CSaLT](#) is a Speech Processing Lab, at LUMS, founded by Dr. Agha Ali, who has been Meta Research Award winner for 3 consecutive years.
- Built a *Web App* for Speaker Identification ML model, which helps in identifying speakers from given audio recordings. I also designed and deployed a *REST API* for the model that can be integrated into any system.
- **Technologies:** *Python, FASTAPI, REACTJS, Tailwind, Hugging Face, Github-Pages.*

## PROJECTS

- **Hubhyve** | [SvelteKit](#), [Tailwind](#), [Pocket Base](#), [Zod](#), [Vite](#)   
Developed a web app for an EdTech startup aiming to connect professional experts with learners all over the world. Learners can gain valuable knowledge directly from experienced professionals.
- **Speaker Identification** | [Python](#), [FastAPI](#), [ReactJS](#), [Tailwind](#)   
Developed a web interface for a speaker identification ML model, incorporating a *REST API*. This system efficiently predicts, with an accuracy of 85%, the speaker of a given test audio by leveraging a pool of reference recordings.
- **Distributed, Fault-Tolerant Key-Value Store** | [Golang](#)  
Built a distributed key-value store that achieve consensus and fault-tolerance through Raft (self-implemented).
- **Buddy Memory Allocator** | [C Language](#)  
Implemented a heap memory allocator system by programming my own version of malloc and free calls in C.

## PROFESSIONAL SKILLS

- **Programming languages:** JavaScript, Typescript, HTML, CSS, Python, Go, Haskell, SQL, PHP, C, C++, Solidity, Matlab.
- **Frameworks, tools & libraries:** ReactJS, Redux toolkit, Svelte/SvelteKit, VueJS/NuxtJS, Material UI, Tailwind, ExpressJS, NodeJS, FastAPI, Git, GitHub.
- **API Technologies:** REST API, GraphQL.
- **Databases:** MySQL, MongoDB, Amazon DynamoDB, Pocket Base.
- **Machine Learning tools:** Pandas, Scikit Learn, Numpy, Pytorch, and Matplotlib.
- **Cloud & Deployment Tools:** AWS EC2, Nginx, Hugging Face, GitHub-Pages.

## EXTRA-CURRICULAR

**LUMS Literary Society – LLS**

**Sep 2022 – March 2023**

- Headed LLS flagship event *Bethak*. It was a monthly event in which people from all over the university were invited to showcase their literary skills.
- Organized and supervised society's orientation for fall 2023, resulting in a record turnout of 115 students.

## INTERESTS

- Networks, Computer systems, Chess, Combat Sports, Music (AC/DC all the way).