

Mohtashim Butt

24100238@lums.edu.pk | +92 316 4932575 | [linkedin.com/in/mohtashim-butt](https://www.linkedin.com/in/mohtashim-butt)
github.com/MohtashimButt

INDUSTRY EXPERIENCE

Technical Content Intern

Educative Inc.

Area: Research and Development

June. 2023 - Aug. 2023

- Conducted extensive research about the topics related to computer vision, computer graphics, and ML.
- Curated around **58** quality articles and introduced a new module on IoT devices to the Educative's Answers platform | [My profile](#).

Low-cost multi-camera module for forest fire detection

Centre for Water Informatics and Technology

Area: Software Development for IoT Devices (Internship)

May. 2023 - June. 2023

- Integrated four ESP-32 Camera Modules to develop a low-cost multi-directional (360°) view.
- Wrote scripts (in PHP, Arduino, and Python) to send captured images to a hosting server and retrieve them to the local PC.
- Processed the images using a PyTorch YOLOv5 model for forest fire detection to trigger an alarm upon potential detection | [Final Report](#)

PROJECTS

Geographically transferable DL model for urban greenspace segmentation

Bachelor's Thesis

Supervisor: [Dr. Zubair Khalid](#) (Ph.D. Australian National University)

Aug. 2023 – Ongoing

- Merging the greenspace polygons from different GIS sources using Python scripting in QGIS software as a basis for our training data.
- Developing a Deep Learning model that segments the input satellite imageries as a certain greenspace class while maintaining geographical transferability | [In-Progress Report](#).

Ta'awun | JavaScript, React, Figma, Firebase

[View source code](#)

A welfare web portal for donors and NGOs to donate and collect monetary and non-monetary funds

- Took the lead in developing a user-friendly UI, and engaged in discussions with a couple of NGOs and donors to come up with a better UX | [Figma Design](#).
- Developed most of the application's frontend in React JS and led the frontend testing sprints.

An assistive application for people with ADHD

HCI Research Project

Supervisor: [Dr. Suleman Shahid](#) (Ph.D. Tilburg University)

Sept. 2022 - Jan. 2023

- Designed interview protocols and conducted semi-structured interviews with 20 adult participants diagnosed with ADHD.
- Inspected and measured the gravity of hyperactivity and mental struggle among ADHD individuals.
- Thematically analyzed the data to extract meaningful insights and developed interactive designs to help people with ADHD cope with their hyperactivity: [Final Report](#) | [Figma Prototypes](#)

TEACHING EXPERIENCE

Teaching Assistant

Software Engineering (CS-360)

Instructor: [Dr. Maryam Abdul Ghafoor](#)

Spring-2023 (on-going)

- Helped the instructor by grading components, conducting office hours, delivering tutorials and making the documentation deliverables for the project.
- Engineering final projects in collaboration with DevSync, Eberyx, and emerging AI startups..

SKILLS

- **Languages / Frameworks:** C, C++, Python(w/ NumPy, sci-kit learn, pandas, Keras, TensorFlow, PyTorch), MATLAB, TypeScript, React, SQL, CSS, Figma, HTML, Haskell, Proteus, Arduino, Content Writing.

EDUCATION

Lahore University of Management Sciences – BS Computer Sciences

Lahore, Pakistan

Relevant Courses: Software Engineering, Advanced Programming, Computer Vision, Machine Learning, Speech and Language Processing with Generative AI, Deep Learning, HCI, ICT4D

Aug. 2020 – May 2024