

# HASSAN MAHMOOD

+92 (321) 168-0674 ◇ DHA, Lahore, Pakistan

[hassanarifmahmood@gmail.com](mailto:hassanarifmahmood@gmail.com) ◇ [linkedin.com/in/ihassanmahmood](https://linkedin.com/in/ihassanmahmood) ◇ [github.com/hassan-arif](https://github.com/hassan-arif)

## OBJECTIVE

---

Recent Computer Science graduate, seeking a full-time role to develop innovative AI solutions and automate workflows. Passionate about continuous learning and collaboration.

## EDUCATION

---

**Bachelor of Science (Computer Science)**, FAST NUCES 2020 - 2024  
CGPA: 3.56

**Intermediate (Computer Science)**, Kips College 2018 - 2020

## SKILLS

---

<b>Programming Languages</b>	Python, C++, Java, Go
<b>Databases</b>	SQL, NoSQL (MongoDB), Firebase, Vector Stores
<b>Web Development</b>	HTML, CSS, Bootstrap, JavaScript, ReactJS, FastAPI/Flask
<b>Desktop Development</b>	PyQt
<b>Operating Systems</b>	Linux, Windows
<b>AI &amp; Machine Learning</b>	LangChain, LLMs, Embeddings, RAG, CNN, Object Detection
<b>Miscellaneous Tools</b>	Selenium, Git, Jira, Trello, L <sup>A</sup> T <sub>E</sub> X
<b>Soft Skills</b>	Problem Solving, Collaboration, Time Management, Leadership

## PROJECTS

---

**PDF Question-Answering Chatbot** June 2024 - July 2024  
Built a conversational tool using PyQt5 that takes multiple images, or pdf files to chat with them. This tool utilizes LangChain's RAG with combination of Groq's "Llama3-8b-8192" LLM, Ollama's "nomic-embed-text" Embeddings, and FAISS vector store. It also uses Pytesseract to extract text from image files.

**Radiance Of The Smile: A Complete Deep Learning Approach**, Final Year Project 2023 - 2024  
Built an X-ray analysis tool for dentists using ReactJS and FastAPI. This tool utilizes YOLOv8 for quadrant detection and enumeration of teeth, followed by DenseNet-121 to classify them based on four diseases or none. Achieved 86% accuracy on a balanced dataset. [See it here.](#)

**CoCode** Nov 2023 - Dec 2023  
Built a real-time code editor tool for software engineers using ReactJS, NodeJS, and WebSockets. [See it here.](#)

**Lung Cancer Prediction** Feb 2023 - May 2023  
Built a binary classifier for pulmonologists using Flask. This tool utilizes ANNs using sk-learn and keras. [See it here.](#)

**MyPillz** Mar 2022 - May 2022  
Built a healthcare system for physicians, patients, and vendors using ASP.NET and MySQL. [See it here.](#)

## EXTRA-CURRICULAR ACTIVITIES

---

- **Workshops:** Arbisoft's [Implementation of MLOps](#) (April 2024), and GDSC's [Info Session on Cloud Computing](#) (Sep 2021)
- **Bootcamps:** Devsinc's [Ruby On Rails](#) (Jan 2023), and LSE's [Graphic Designing](#) (Jul 2021 - Aug 2021)
- **Competitions:** PUCON's [AI Competition](#) (Feb 2024)
- **Volunteering:** FAST's [Job Fair](#) (2022), and WWFP's [ECO-Internship Programme](#) (2019)
- **Hobbies:** Learning technologies, and reading nonfiction books.