M. HASSAAN ARSHAD

+923470102521 ◇ [Email](#) ◇ [LinkedIn Profile](#) ◇ [Github](#)

OBJECTIVE

To contribute as a multidisciplinary engineer skilled in developing intelligent systems, scalable architectures, and immersive applications. I bring experience across Web, AI, full-stack, game, and DevOps ecosystems, with a focus on building products that merge performance, usability, and innovation.

EDUCATION

BS Computer Science, FAST-NUCES ISB   December 2024
Relevant Coursework: Programming, web development, full-stack, Machine Learning, Generative AI, Cloud engineering, Information security, Networking, DBMS, Blockchain, DevOps.

Cambridge A levels, The City School, ISB, PK   2017 - 2019

Cambridge IGCSE 'O' Levels, The City School, ISB, PK   2015 - 2017

SKILLS

Programming Languages	Python, C, C#, C++, x86 Assembly, Javascript, SQL
Cloud Technologies	AWS, Azure, Lambda
Machine Learning	TensorFlow, PyTorch, scikit-learn, Keras
Generative AI	GANs, VAEs, Stable Diffusion
Networking	TCP/IP, DNS, HTTP/HTTPS, Wireshark, cisco
Databases	MySQL, MongoDB, Oracle, Microsoft SQL server
Web Development	HTML, CSS, Javascript, React, Node.js, full-stack
DevOps	Docker, k8s, Helm
Blockchain	GoLang, Solidity, Truffle
Soft Skills	Teamwork, Problem-Solving, Time-Management, Adaptability
Management	Leadership, Project Management, Event Management, Event Hosting

EXPERIENCE

Simulation Engineer   March 2025 - August 2025
NASTP   *Islamabad, PK*

- Development of 3d simulation software, classified

Intern   Jun 2020 – Aug 2024
Shifa Int'l Hospital   *Islamabad, PK*

- Developed and maintained web applications using React and Node.js
- Focused on both frontend and backend web development

Intern   May 2024 - July 2024
M-Labs   *Lahore, PK*

- Role: Game Programming
- Developing & Delivering projects with a designated team
- Tools: GameMaker Studio 2.0, Unity engine, Roblox studio

Freelance Programming   Feb 2020 - Present
Independent   *Islamabad, PK*

- Worked with varying clients, international and local

- Mainly work on software design & development, Full-Stack Web Development, and Research work

PROJECTS

ReArtify-AI R&D FYP project: Developed an end-to-end system to repair damaged paintings using five custom DeHazenet CNN models and a Keras Classifier, integrated with Flask and MERN stack.

Research Paper on GANs Wrote an unpublished research paper on the implementation of GANs in human-anime face translation. Tested 12 models, and proposed a new method for the task. Discussed mode collapse as well.

CI/CD pipeline builder Designed and implemented a CI/CD pipeline, automating the build, test, and deployment processes for a cloud-based system. Utilized tools such as *Jenkins, Docker, and Kubernetes* to ensure seamless integration and continuous delivery of software updates.

Flight Route Optimization Designed and implemented a flight route optimization algorithm using Genetic Algorithm.

Web Development Full-Stack multiple Websites development using *React, Node.js, MongoDB, Flask, ASP.NET, oracle DB, HTML & CSS*

POS Software Multiple desktop POS software development using a variety of languages e.g. *Java, C++, Python*

Networking Large-Scale network development using *Cisco Packet Tracer*

Chatbot development Designed and implemented an advanced chatbot leveraging OpenAI's *GPT-3.5-turbo and LangChain.* The chatbot was capable of engaging in detailed discussions about a master's thesis, demonstrating good levels of comprehension and contextual understanding.

Blockchain System Developed a blockchain system using *GoLang.*

EXTRA-CURRICULAR ACTIVITIES

- Member of AICP, participating in their events and occasionally helping the management.
- 3rd position winner of 2024's FAST Startup Challenge, with successful incubation of startup idea.
- Member of FSA (Fast Society of Arts), regular engagement in event planning & organization. Have contributed to multiple successful events.
- Member of Fast Data Science Society's events team. Participated and contributed to the successful implementation of multiple events.
- Member of Fast Young Leaders Society's marketing team. Contributed in successfully marketing the initial events of the society

LEADERSHIP

- Head of Media team In FSA, leading a team of many highly capable individuals. Contributed greatly to the success of the events, and the social media outlook of the society. e.g. self-produced video of our first major event
- Led multiple projects to successful completion ahead of deadlines through effective management, collaboration, and leveraging the strengths of an amazing team. Fostered a collaborative and supportive environment that ensured timely and high-quality deliverables.
- Head of team in FAST Startup Challenge

CERTIFICATIONS

- AWS Essential Training for Developers
- Career Essentials in Generative AI by Microsoft and LinkedIn
- AWS Academy Graduate - AWS Academy Microservices and CI/CD Pipeline Builder