




KAF ABBAS

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<https://leetcode.com/u/kafabbas24/> • <https://github.com/Kaf-Abbas-10>

Education

BSCS

Islamabad, Pakistan
6th semester

FAST National University

Professional summary

Motivated Front-end developer with expertise in HTML, CSS, JavaScript, and React, complemented by a strong foundation in artificial intelligence and machine learning using Pandas, Scikit-learn, NumPy, and Matplotlib. Proficient in neural networks with PyTorch and skilled in high performance computing with GPUs and distributed systems through CUDA, OpenCL, MPI, OpenMP, OpenACC, and Numba. Experienced in containerization using Docker to streamline deployment and development processes. Committed to leveraging technical skills to drive innovation and efficiency in software development projects.

Skills

AI & Machine Learning:

- Python, Pandas, NumPy, Scikit-learn, TensorFlow, Matplotlib, PyTorch
- **High-Performance Computing:** CUDA, OpenCL, OpenMP, MPI, NumPy, OpenACC
- **Web Development:** HTML, CSS, JavaScript, React

Tools & Platforms:

- Docker, Git, Linux
- **Other:** Problem Solving (300+ LeetCode problems), Competitive Programming (ICPC Finalist)

Work history

AI and HPC Intern

- July 2025 - August 2025

PCN Research Lab

Teaching Assistant

- Supported the course instructor by conducting review sessions, clarifying challenging concepts, and guiding students through Assembly language labs.
- Assisted with grading, offered feedback, and addressed student questions to deepen their understanding of computer organization principles.

FAST National University

Lab Demonstrator

- Guided students in lab sessions by providing hands-on support and feedback, enhancing their understanding of course materials and adherence to safety protocols.

FAST National University

Freelancer

- Delivered client-tailored services on Fiverr, gaining experience in client communication, project management, and deadline adherence.

Fiverr

Coding Practice

- Solved over 300 problems on LeetCode, showcasing proficiency in algorithms and data structures.
- Demonstrated strong problem-solving abilities and consistent commitment to continuous improvement in coding efficiency.

LeetCode

Competitive Programming

- **COMPETE-24:** Placed 6th amongst teams from top class universities like NUST, FAST, NED, AIR
- **CODE Sprint 1 and CODE Sprint 2:** Placed well among participants, strengthening coding speed and accuracy.
- **ICPC Finalist:** Qualified for the ICPC regional finals.

ICPC Finalist

Projects

Artificial Intelligence:

- Salary Segmentation(k-means clustering)
- Breast Cancer Prediction
- Connect-4 (minimax with alpha-beta pruning)
- Sudoku Solver(Constraint Satisfaction Problem)
- Knapsack(Genetic Algorithm)

Neural Networks:

- Iris Classification (NN)
- Driving Agent (Multi-Layer Perceptron)
- Pneumonia Detection (Convolutional NN)

High-Performance Computing:

- MNIST-NN-CUDA-Optimization
- Matrix Multiplication
- Quantum Circuit Simulation using Tensor Networks (GPUs and Distributed Systems)
- openMP-optimized-circle-rendering

Web-Development:

- SportSpace (A MERN based Sport facility booking web-application)
- Portfolio Website (unhosted)

Certifications and Licenses

- Google's Machine Learning Crash Course
- Andrew NG's Machine Learning Specialization
- Andrew NG's Deep Learning Specialization