

EDUCATION

Ghulam Ishaq Khan Institute of Engineering Sciences and Technology

Bachelor of Science in Computer Science CGPA 3.20 / 4.00

Anticipated 05/2024

Relevant Courses: Databases, Data Structures & Algorithms, Theory of Automata, Computer Organization & Assembly Language, Software Engineering, Object Oriented Programming, Operating Systems, Computer Architecture, Computer Communications & Networking, Introduction to Artificial Intelligence, Systems Programming, and Structure & Interpretation of Computer Programs (Functional Programming).

PROFESSIONAL EXPERIENCE

AI/ML Project

Topi, Pakistan

Artificial Intelligence Project | **Python, NumPy, TensorFlow, Keras**

Apr 2023 – May 2023

- Developed and implemented a SuperResolution model using machine learning techniques that achieved 8 times improvement in image resolution.
- Utilized Python, TensorFlow and Keras to build a convolutional neural network (CNN)-based model.
- Evaluated the model's performance using the mean square error (MSE) function, achieving an MSE score of 0.0029, demonstrating the accuracy of the model's predictions.

Machine Learning

Topi, Pakistan

Artificial Intelligence Project | **Python, Pandas, TensorFlow, Keras**

Feb 2023 – Apr 2023

- Created a customized CNN architecture with TensorFlow, integrating convolutional layers, pooling layers, and fully connected layers to enhance feature extraction and classification accuracy.
- Developed and trained a multi-classification model on the CIFAR-10 dataset, consisting of 60,000 32x32 color images, using a convolutional neural network (CNN) architecture.
- Executed comprehensive model performance evaluation resulting in a model accuracy of approximately 88%.

Web Development

Topi, Pakistan

Web Project | **JavaScript, React.js, Node.js, Express.js, MongoDB**

Jan 2023 – Feb 2023

- Developed a MERN web-app enabling users to share places with authenticated access, using CRUD functionality for images and location data.
- Implemented secure authentication and authorization protocols to safeguard user data.
- Utilized React.js to create engaging UI and Node.js for server-side operations and MongoDB integration..

Software Development

Topi, Pakistan

Data-Base and Software Eng. Project | **SQL**

Feb 2022 – April 2022

- Contributed on the back end development, implementing database design and management to store and retrieve data related to pets, users, and transactions.
- Drafted comprehensive documentation which included functional & non-functional requirements, use case & ER/EER diagrams

Graphic Representation of Nodes

Topi, Pakistan

Data Structures and Algorithms Project | **Linked List, C++**

Nov 2021 – Dec 2021

- Executed a project using C++ and SDL2 library that reads data from a .txt file and displays the clustering of a graph in a circular format, along with functionalities.
- Proposed shortest path algorithms, such as Dijkstra's algorithm, to find the distance between two nodes in the graph.

EXTRACURRICULARS

ACM GIKI – Tech Head

Feb 2021 – May 2023

GIKI Microsoft Students Club – Member

Jan 2022 – Nov 2022

Licenses & Certificates

Programming with JavaScript – Meta

May 2023

AI For Everyone – DeepLearning.ai

Feb 2023

Intermediate Python – DataCamp

Jan 2023

SKILLS

Python, C/C++, SQL, JavaScript, React.js, Node.js, Express.js, MongoDB, Pandas, NumPy, HTML5, CSS, Oracle, AI/ML, TensorFlow, Scheme