

FAZAL E RABBI

ML/AI Software Engineer

✉ fazalerabbi.se@gmail.com ☎ +923098480411 🌐 [Portfolio](#)

I thrive on innovation as an AI/ML engineer. Eager to bring my evolving skills to a forward-thinking company, I'm excited to leverage cutting-edge tech for impactful change. Seeking a challenging data scientist role in a dynamic, innovative environment, I aim to use my technical prowess and analytical skills to develop groundbreaking solutions.

Experience

● Intern | Systems Limited

July 2023 to Sep 2023

- Enhancement of skills in cutting-edge technologies through practical application in dynamic projects.
- Deepened understanding of AI applications and their real-world implications
- Proficiency in methodologies and processes relevant to AI development.
- Strengthened capability to innovate within a collaborative software development setting.

● Final Year Project (FYP): Automated Image Captioning & Text-to-Speech Web App

- Developed a web application allowing users to upload images for automated caption generation.
- Utilized Hugging Face's Blip framework, fine-tuned on Diffusion dataset, for accurate captions.
- Integrated text-to-speech functionality for audio caption output.
- Demonstrated proficiency in ML, web dev, and accessibility integration.
- Presented project at showcases, showcasing problem-solving skills and cutting-edge tech utilization.

● Learning Through Small Projects

- Implemented machine learning algorithms on **Boston housing** and **Iris Flowers datasets**, employing **NumPy** and **TensorFlow**.
- Explored deep learning techniques, including **Artificial Neural Networks**, **ResNet**, and **LeNet** implementation.
- Contributed to **YOLO** for custom object detection, involving weights training.
- Crafted **custom image classification models** using TensorFlow, showcasing creativity and adaptability.
- Developed **end-to-end student performance** calculation using ML algorithms, incorporating EDA and feature engineering techniques.
- Developed **end-to-end Chicken Disease Detection** system with VGG-16.
- Utilized **Git for version control** and automated testing frameworks.
- Text Summarization with **Pegasus (CNN/DailyMail)**
- Spearheaded text summarization projects leveraging **Google's Pegasus model trained on the CNN/DailyMail dataset**.
- Implemented **CI/CD pipelines for automated testing and deployment**, ensuring seamless integration of model updates.
- Presented project outcomes, showcasing the efficacy of Pegasus in generating concise summaries, at technical forums.

Skills

- Proficient in C++ with strong understanding of Object-Oriented
- Programming (OOP) and Data Structures and Algorithms (DSA)
- Experienced in Python with expertise in Flask for web development
- TensorFlow for machine learning, and MongoDB for database management
- Skilled in JavaScript with knowledge of HTML/CSS for frontend development

Education

- **The University Of Lahore** 2020-2024
 - Bachelor of Computer Science
- **Crescent College** 2020
 - Major ICS ; Computer Science

Courses

- **Convolutional Neural Networks in Tensor Flow | Deep Learning AI** April 2023
- **Introduction to Tensor Flow for Artificial Intelligence, machine learning and Deep Learning| Deep Learning AI** April 2023
- **Improving Deep Neural Networks: Hyperparameter Tuning, Regularization & Optimisation| Deep Learning AI** March 2023
- **Neural Networks & Deep Learning | Deep Learning AI** February 2023
- **Exploratory Data Analysis for Machine Learning| Deep Learning AI** October 2022
- **Supervised Machine Learning Regression| IBM** September 2022
- **Advanced Computer Vision using TensorFlow | IBM**

Additional Information

- Proficiency in programming languages such as Python, Javascript, C++ etc.
- Knowledge of machine learning algorithms and techniques.
- Familiarity with deep learning frameworks like TensorFlow,
- Understanding of neural networks and their architectures.
- Ability to work with large datasets and perform data preprocessing.
- Skills in model evaluation, validation, and optimization.
- Experience with version control systems like Git.
- Strong problem-solving and analytical skills.
- Effective communication and collaboration in a team environment.

References

- Available on Request