

Fakhir Ali

- I like to train neural networks and build applications on top of them.
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Things I have done

Models Trained

- Fine-Tuned Wav2Vec2 and Whisper on CommonVoice Urdu for speech to text
 - Fine-Tuned Whisper-large-v2 using [LoRA](#)
- Fine-Tuned a Question and Answer [Model](#) on [Qur'anic Reading Comprehension Dataset](#)
- Fine-Tuned [TrOCR](#) on urdu for handwriting recognition that beats [previous approach](#)
- Trained a [Segformer](#) on [SemiCol](#) Tumor segmentation dataset

Projects/Prototypes

- [Voice Chatbot](#)
 - Talk to a chatbot
- [ChatPDF](#)
 - Chat with documents from scratch, RAG pipeline that uses an embedding model, vector store, instruction-LLM.
- [TensionFlow](#)
 - An auto grad engine using only numpy. Trained a Linear model on MNIST.
 - To learn how Neural Networks are trained (gradient descent)
- [ChatBot](#)
 - base LLM + pre-prompting
- [Compression](#)
 - Made a compression library in python because [Compression == Intelligence](#)

Other

- Explaining Neural Network predictions using Shap, Lime, [etc](#)
 - [AlifZero](#) Chess Bot (Work in progress)
 - Made some android [games](#)
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Education

- FAST NUCES Islamabad
 - 3 yrs of Bachelor's in Artificial Intelligence (2020 - 2023)
- Beaconhouse Margalla Campus Islamabad
 - 40 score in International Baccalaureate (2018 - 2020)
 - 9 As in O Levels (2015 - 2018)