

Syed Addan

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<https://github.com/SyedAddan>

SUMMARY

- Developed 5+ machine learning projects for various use cases, achieving a **90%+ success rate**.
- Completed an Internship where I had to lead a team of 3 interns to develop a semantic translator using BERT that achieved an accuracy rate of 90% in translating mix-coded Roman Urdu to English and also published a paper on it.
- Won various Hackathons in the field of Artificial Intelligence and Machine Learning such as SOFTEC's Artificial Intelligence Competition and AIO's hack-it.
- Recognized as a top 1% data scientist in the world, with certifications in IBM ML, and advanced ML on Google Cloud.
- Received a gold medal for academic excellence in FAST, Islamabad and maintained a CGPA of 3.15 in the Bachelor's Program.

EMPLOYMENT & EXPERIENCE

AIM Lab, Islamabad

Data Science Intern

February 2022 - June 2022

- Led a team of 3 interns to develop a semantic translator using BERT that achieved an accuracy rate of 90% in translating mix-coded Roman Urdu to English, completing the project within a tight deadline of four months.
- Conducted research on Code Mixed Roman Urdu Translation To English and published a paper on finetuning the multilingual T5 model to achieve an improved accuracy rate of 95%, which was accepted by a top-tier conference in Natural Language Processing.

PROJECTS

Familiar

<https://github.com/SyedAddan/Familiar>

September 2023 - Present

- Developing a personalized sentient avatar for self-help
- Implementing an LLM finetuned and contextualized to our needs and requirements.
- Finetuning Stable Diffusion and Pix2Pix to generate avatars from user-provided images.
- Integrating all the models used in the project to create a seamless pipeline for the project.
- Creating a website for the project using the MERN stack keeping in mind the performance of the application.

Lyrical

<https://github.com/SyedAddan/Lyrical>

May 2023 - Present

- Developing an end-to-end Lyrics Generation Model using recurrent neural networks and natural language processing, capable of intelligently generating coherent lyrics.
- Implementing a data collection pipeline with web scraping from platforms like Genius Lyrics, followed by meticulous preprocessing for data quality, consistency, and conditioning using metadata.
- Training the model with advanced deep learning techniques, including recurrent neural networks and transformer architectures.
- Conducting iterative fine-tuning using evaluation metrics, resulting in optimized, creative, and contextually relevant lyric generation.

TaleForge

<https://github.com/SyedAddan/TaleForge>

May 2023 - Present

- Developing TaleForge, a pioneering machine learning initiative leveraging GPT-2, GPT-ForAll, GPT-Neo, BERT, or GPT-J models for crafting enchanting Urdu stories.
- Curating a diverse dataset from esteemed literary sources to ensure each TaleForge-generated story embraces the cultural nuances and values embedded in Urdu literature.
- Orchestrating a user-friendly experience, allowing creators to effortlessly preprocess data, train, and fine-tune models, resulting in a transformative and seamless Urdu story generation journey.
- Combining cutting-edge language models with users' boundless imagination enables the crafting of narratives that transcend boundaries and leave an indelible mark in the realm of Urdu storytelling.

EDUCATION

Bachelor's in Artificial Intelligence

FAST Islamabad

August 2020 – July 2024

- Received a gold medal for academic excellence and maintained a CGPA of 3.15 in the Bachelor's Program.
- Completed and got a distinguishable grade in the courses of Machine Learning, Natural Language Processing, Artificial Neural Networks, MLOps and Computer Vision

AWARDS & CERTIFICATIONS

Machine Learning Engineering for Production (MLOps) Specialization	<i>DeepLearning.AI</i>
Applied Data Science with Python	<i>University of Michigan</i>
Advanced Machine Learning on Google Cloud Certification	<i>Google</i>
IBM Machine Learning Professional Certificate	<i>IBM</i>
Top 5 Machine Learning Engineers in Pakistan	<i>PIAIC</i>
Top 1% of Data Scientists in the world	<i>Turing</i>
Gold Medal for Excellence in Academia	<i>FAST, Islamabad</i>

INTERESTS

Motor-biking, RPGs (Elden Ring, etc), Hiking (in the Margalla Hills), Art (the abstract kind), Jazz, Intuitive & Curious Things, Anime, AR/VR, and Investing

INDUSTRY SKILLS

- **Machine Learning** (TensorFlow, PyTorch, scikit-learn, Keras, Huggingface)
- **Natural Language Processing** (NLTK, GPT, LangChain)
- **Large Language Models** (GPT, BERT, T5, LLAMA, Falcon, Dolly, BLooM)
- **Computer Vision** (OpenCV, PyTorch, TensorFlow)
- **Deep Learning** (ANNs, CNNs, RNNs, LSTMs)
- **Cloud platforms** (AWS)
- **Big data technologies** (Hadoop)
- **Statistical analysis** (Matplotlib, Pandas)
- **Agile methodologies** (Scrum, Xtreme Programming)
- **Software engineering** (object-oriented programming, software design patterns, version control, documentation)
- **Natural Language Generation** (GPT, LangChain)
- **Model serving frameworks** (TensorFlow Extended)
- **Monitoring and logging tools** (Prometheus)
- **Containerization technologies** (Docker, Kubernetes)
- **ML Pipelines** (TensorFlow Extended, Kubernetes)
- **Backend development** (Flask, FastAPI, Django)
- **MERN stack** (MongoDB, ExpressJS, ReactJS, NodeJS)

SOFT SKILLS

- Technical Leader
- Excellent Communicator
- Planning and Scheduling
- Resource management
- Communication management
- Strategic thinker
- Innovator
- Decision Maker
- Soft Spoken
- Critical Thinker