Muhammad **Ammar**

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Experience

Solution Analyst, Learners.ai   July 2023 – Present

- Used LangChain and pinecone to create a GPT powered chatbot that takes in a sales call transcript and generates a sales proposal using information and structure from past sales proposals.
- Developed a copywriter chatbot using LangChain Agents, using custom functions as tools, and a custom knowledge base and structure guide to improve the responses of the chatbot.
- Maintained and updated data dictionaries on Google Sheets, ensuring data consistency and accuracy.
- Designed and implemented lead scoring model to help clients focus on leads likely to turn into clients.
- Constructed dashboards in HubSpot, enhancing data visualizations and insights.
- Created Data Flow diagrams representing current flow of data, and future flow of data based on suggested improvements.

Undergraduate Research Assistant   Nov 2021 - July 2022

- Worked on senior year research project with bi-weekly presentations to the supervisory panel.
- Developed control algorithm for mobile robot using Arduino, ultrasonic sensors, IR sensors, and encoders.
- Secured funding under the National Grassroots Research Initiative 2022, held by IGNITE.
- Secured funding for AHFE Conference registration fee under Pakistan and European Union (EU)'s Horizon 2020, ENHANCE project.

Projects and Publications

- A Chain-Driven Live Roller Mechanism for Loading and Unloading Packages on Autonomous Mobile Robots in Warehouses – Published as first author.
- Blogpost: Building a Q&A chatbot on private data.
- Blogpost: Transfer Learning with PyTorch.
- Developed an application that converts podcast to text using OpenAI Whisper and generates a summary.
- Developed and deployed a food classification app by finetuning EfficientNet (EffNet).

Technical Skills

- **Data Analysis:** Excel, Google Sheets, Data Flow Diagrams, Data Analysis with Python
- **Natural Language Processing:** word embeddings, LSTM, GRU, Transformers, LLMs, OpenAI API, LangChain
- **Computer Vision:** OpenCV, Image Processing, YOLO, SSD, CNN, Vision Transformers
- **Programming/Tools:** Python, GIT, Streamlit, Gradio
- **Machine Learning:** Data cleaning and analysis, Classical Machine Learning
- **Deep Learning:** Neural Networks, PyTorch, Keras

Education

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY (NUST)   Islamabad, Pakistan

B.Sc. Mechanical Engineering **CGPA: 3.16/4.0**

IELTS 8.5 Bands

Certifications & Courses

- Machine Learning Specialization from DeepLearning.AI
- Natural Language Processing Specialization from DeepLearning.AI
- PyTorch for Deep Learning from Zero-to-Mastery
- Generative AI with Large Language Models from DeepLearning.AI
- Uplimit Building AI Products with OpenAI