# PROFESSIONAL SUMMARY

# AI Engineer with extensive expertise in Python, TensorFlow, and PyTorch. Demonstrated success in optimizing deep learning models, reducing inference time by 25%, and developing production-ready ML pipelines using MLflow. Proficient in implementing computer vision and NLP solutions, with experience in transformers, CNNs, and state-of-the-art frameworks like Hugging Face. At Mentorness, improved model accuracy by 18% through advanced feature engineering and ensemble techniques. During my tenure at Ozibook, successfully deployed and scaled AI solutions that reduced customer service response time by 40%. Passionate about advancing AI technology and developing scalable solutions that drive business innovation.

# SKILLS:

**Programming Languages**: Python, R, SQL, Java, C++

**Tools and Frameworks**: Machine Learning, Deep Learning, Pandas, NumPy, Matplotlib, TensorFlow, Scikit learn, PyTorch

**Databases and Cloud Services:** MySQL, MS SQL Server, Mango DB, AWS, Azure, GCP

**Soft Skills:** Ability to get the job Done, Analytical Thinking, Communication, Problem-Solving, Attention to Detail

# Projects:

* [**OCR-Image-to-text and Conversation**](https://github.com/Rayyan9477/OCR-Image-to-text) **|** [**Deployed link**](https://rayyan9477-ocr-image-to-text.streamlit.app/) **| Text Extraction, Image Processing, Q/A |**

Developed an OCR Image-to-Text application using Python and Streamlit, focusing on accurate text extraction and image preprocessing. Enhanced reliability and performance, enabling seamless conversion of diverse image formats into editable text.

* [**Contextual Chatbot**](https://github.com/Rayyan9477/Contextual-Chatbot) **|** [**Deployed Link**](https://rayyan9477-contextual-chatbot.streamlit.app/) **| LLM Fine-tuning, Pytorch, NLP, Transformers, Generative AI |**

Developed a beginner-friendly, advanced contextual chatbot using PyTorch, leveraging deep learning and NLP techniques to understand and respond to user inputs conversationally in real-time.

* [**Hate Speech Detection**](https://github.com/Rayyan9477/Hate-Speech-Detection) **|** [**Deployed Link**](https://hate-speech-detection-trmipfakvkn6ycvnjkpmqk.streamlit.app/) **| Streamlit, NLP, Transformers, Tokenization |**

Developed an end-to-end machine learning pipeline for hate speech detection using Python, NLTK, and scikit-learn, focusing on evaluating, preprocessing, and cleaning text data to enhance classification accuracy.

* [**House Price Prediction and Property Recommendation App**](https://github.com/Rayyan9477/Data-Driven-House-Price-Prediction-and-Property-Recommendation-App) **|**[**Link**](https://github.com/Rayyan9477/Data-Driven-House-Price-Prediction-and-Property-Recommendation-App)**| Python, ML, Data Analytics, Regression |** Developed a data-driven house price prediction and property recommendation app using machine learning algorithms, achieving an accuracy rate of 45% in predicting house prices.

# EXPERIENCE

**Data Analyst: Ozibook | Bangalore, India October 2024 – Present**

* **Optimized SQL Queries and Interactive Dashboards**: Enhanced SQL query performance by 20%, enabling faster data processing, and developed Power BI dashboards, improving data visualization and decision-making processes by 15%.
* **Predictive Analytics Implementation**: Built machine learning models using Python libraries such as Pandas, NumPy, Matplotlib, Scrapy, and Scikit-Learn, achieving an 18% increase in predictive accuracy.

**AI Engineer (Machine Learning): Digital Empowerment Networks | Islamabad, Pakistan July – September 2024**

* **Advanced Data Processing:** Conducted data cleaning, preprocessing, and visualization to prepare large datasets for analysis, enhancing data quality by 30%.
* **Machine Learning Models:** Implemented concept such as k-means clustering, logistic regression, and NLP tokenizing to build predictive models, improving fraud detection accuracy by 22% and reducing false positives by 99.05%.

**Data Analyst Intern: Mentorness | Remote, Pakistan May 2024 – June 2024**

* **Power BI Dashboards, Presentation Skills:** Developed interactive Power BI dashboards, enhancing data visualization and decision-making resulting in a 20% boost in report efficiency and 15% improvement in decision-making accuracy.
* **SQL Data Management**: Optimized SQL queries for data extraction and analysis, enhancing data retrieval speed by 25% and ensuring accurate data handling.

# EDUCATION

**FAST NUCES Islamabad, Islamabad Pakistan Aug 2022 – June 2026**

BS: Software Engineering