

Abdul Rafay

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WORK EXPERIENCE

Working Student

Mühlbauer ID Services GmbH [1 Aug 2024 – Current]

City: Dresden | Country: Germany

- Working on open source LLM's.
- Handling large text datasets.
- Developing data pipelines.

Machine Learning Engineer

Xeven Solutions [5 Jun 2023 – 25 Sep 2023]

City: Lahore | Country: Pakistan

- Collaborated closely with clients to understand their objectives and deliver tailored solutions.
- Developed a strong proficiency in Python programming through dedicated learning and hands-on experience.
- Designed and implemented APIs using the FastAPI framework to facilitate efficient communication between systems.
- Established data pre-processing and feature engineering pipelines to ensure high-quality data for modeling purposes.
- Integrated the OpenAI API seamlessly into projects to enhance natural language processing capabilities.
- Conducted thorough testing and validation procedures to ensure the reliability and accuracy of implemented solutions.

Trainee Data scientist

Machine Learning 1 [1 Feb 2023 – 26 Apr 2023]

City: Lahore | Country: Pakistan

- Designed and implemented APIs for Machine and Deep Learning models.
- Executed data preprocessing tasks to ensure optimal quality for training datasets.
- Conducted training sessions for deep learning models, employing industry-leading methodologies and techniques.
- Collaborated with cross-functional teams to integrate and deploy machine learning models into production environments, ensuring seamless operation and maximum impact.

Teaching assistant

University of Management and Technology [1 Feb 2021 – 30 Jan 2022]

City: Lahore | Country: Pakistan

- Assisted the professor in teaching AI/ML courses.
- Developed lecture material for Object-Oriented Programming (Java) and database courses.
- Provided support for lab sessions and quizzes.
- Implemented Java-MSSQL integration for real-world project simulations.

EDUCATION AND TRAINING

Master of Computational Modelling and Simulation

Technische Universität Dresden [1 Oct 2023 – Current]

City: Dresden | Country: Germany | Website: <https://tu-dresden.de/>

Bachelors of Computer Science

University of Management and Technology [10 Feb 2019 – 18 Feb 2023]

City: Lahore | Country: Pakistan | Website: <https://www.umat.edu.pk/>

PUBLICATIONS

[2023]

EfficientSkinDis: An EfficientNet-based Classification Model for a large manually curated dataset of 31 Skin Diseases.

[2023]

EyeCNN: Exploring the Potential of Convolutional Neural Networks for Identification of Multiple Eye Diseases through Retinal Imagery.

PROJECTS

EfficientSkinDis

- Data curation through web scrapper.
- Trained & evaluated multiple convolutional Neural Network models to classify 31 skin diseases.
- Deployed the model as an API on the SyndicAI platform.
- The API was integrated with a streamlit web server.
- Technologies (Python, OpenCV, GitHub, Streamlit, SyndicAI)

CafeAdmin

- Utilized Java and integrated MS SQL via JDBC for robust data handling, ensuring efficient management of cafe operations.
- Implemented receipt generation and detailed monthly/yearly sales and profit reports using JasperReports, enhancing business insights and decision-making processes.
- Enhanced system performance by optimizing database queries, ensuring efficient transaction processing, and improving overall user experience.
- Designed and implemented a user-friendly interface to streamline order processing and inventory management, prioritizing ease of use for staff and efficient operation of the cafe.