BILAL SARDAR

MACHINE LEARNING ENGINEER | CAMBRIDGE, UNITED KINGDOM | +44-7887295078

DETAILS

Cambridge
United Kingdom
+44-7887295078
contactbilalsardar@gmail.com

SKILLS

Languages: Python, C++, Java

Computer Vision: OpenCV, Roboflow

NLP: NLTK, spaCy, Hugging Face Transformer

ML/DL: TensorFlow, PyTorch, Scikit-learn, Keras

Big Data & Cloud: AWS SageMaker, Google Cloud AI

Android: Android Studio, Java, Kotlin, TensorFlow Lite

DevOps & MLOps: Docker, Git, MLflow

Other: SQL, RESTful APIs

LINKS

Hugging face

GitHub

Google Courses Certificate

ACHIEVEMENTS

6 times in Deans List (Semester 2,4,5,6,7,8)

Availed 100 Percent Scholarship in College

PROFILE

Innovative Machine Learning Engineer with strong AI and deep learning expertise. Experienced in developing ML models for computer vision and NLP applications. Seeking to leverage technical skills and research background in a challenging ML role.

PUBLICATION

Conference Paper:

Sardar, B. (2024). Western Jackdaw Call Classification in Noisy Environments Using CNNs. In Proceedings of VIHAR 2024 (Vocal Interactivity in-and-between Humans, Animals and Robots).

EXPEREINCE

Internship Research Assistant - Extremism and Online Recruitment Analysis, Cambridge
April 2024 — July 2024

Analyzed online recruitment patterns of UK non-violent extremist groups using ML techniques, conducted data scraping, and applied NLP to social media content

Research Assistant at Anglia Ruskin University, Cambridge
September 2023 — Present

Teacher Assistant at FAST NUCES University, Lahore

Courses:

Software for Mobile Devices, Parallel and Distributing Computing, Artificial Intelligence

PROJECTS

Western Jackdaw Call Detection

Created wav2vec model for bird call classification in noisy environments, implemented noise reduction using background noisy data, and developed population monitoring and behavior analysis using PyTorch and advanced signal processing

Flood Detection Using Satellite Imagery

Developed and compared U-Net, Vision Transformer, ResNet-50, VGG-16, and Random Forest models for flood detection using Sen1Flood11 dataset (4,383 images); achieved up to 94.37% accuracy and 0.92 IoU; tested generalization on unseen data from Rio Colima, Mexico

A Smart Mirror

Designed IoT device integrating GPT3.5 for conversational AI, real-time emotion detection using facial recognition, and personalized information display with Raspberry Pi

Racconto

Developed Android app with AI-powered image search using transfer learning, emotion detection, and GPT3.5-based storytelling module with custom voice cloning technology

PICAR

Developed autonomous driving system with novel bus lane detection, object recognition, lane following, and obstacle avoidance using TensorFlow, OpenCV, and RaspberryPi

EDUCATION

Msc in Artificial Intelligence, Anglia Ruskin University, Cambridge
September 2023 — June 2024

Grade: Distinction

BSCS, FAST - National University of Computer and Emerging Sciences (NUCES), Lahore
August 2019 — August 2023

GPA 3.56