SYED SAAD SAIF

Highly motivated PhD researcher specializing in Al-driven methodologies for product classification, customer profiling, and time-series analysis. Proven expertise in leveraging advanced machine learning techniques, including deep learning, clustering, and hybrid models, to address challenges in data-rich domains. Aiming to demonstrate significant improvements in classification, profiling, and predictive accuracy through experiments on real-world datasets, offering actionable insights and practical frameworks to optimize operations in industry.

Education

- PhD in Artificial Intelligence (Sapienza University of Rome, Rome, Italy) 11/2024 -Present
 - Research Focus: Machine Learning, Time-Series Analysis, Deep Learning
- Master's in Control Engineering Sapienza University of Rome, Rome, Italy 09/2018 -10/2023
 - Thesis: PCB Assembly Quality Control using AI
 - Specialized in Robotics, Machine Learning, Automation, and Control Systems
- Bachelor's in Electrical and Electronics Engineering Middle East Technical University, Ankara, Turkey 09/2014 - 06/2018
 - Specialized in Control Theory, Circuit Design, Microprocessors, and Embedded Systems

Research Experience

- Token Financial Technologies Koç Group, Istanbul, Turkey
 - Lead researcher on AI and Computer Vision program, focusing on Automated Optical Inspection (AOI) for PCB assembly.
 - Developed and implemented novel ML techniques for robust AOI, significantly improving production line efficiency.

Publications

- ARIES: A System for Landslide and Wildfire Risk Management (MED24, 2024)
- Automated Optical Inspection for Quality Control in PCBA assembly lines: a case study for Point of Sale Devices Production Lines (IEEE, 2024)
- Automated Optical Inspection for Printed Circuit Board Assembly Manufacturing with Transfer Learning and Synthetic Data Generation (IEEE, 2022)
- Forest Fire Risk Prediction from Satellite Data with Convolutional Neural Networks (IEEE, 2021)

Skills

- Machine Learning: Deep Learning, Computer Vision, Transfer Learning, CNNs
- **Programming:** Python (Tensorflow, Keras, NumPy), C/C++, MATLAB
- Tools: Git, Linux

Awards

• **Telespazio (Italy) TTEC-2020 Innovation Award** - First Prize for research on ML-based forest fire prediction.