Javed Ahmad

Research Interests:

3D scene perception | deep learning | multimodal fusion

Education

11/2020 - present Ph.D in Computational Vision, Automatic Recognition and Learning

Doctoral researcher at istituto italiano di tecnologia (iit), Italy

Research Theme: 3D scene understanding with deep learning and geometric reasoning

University Affiliation: Università degli studi di Genova (UniGe), Italy

2017 - 2019 Master of Science in Electrical Engineering

Information Technology University, Pakistan

Majors: adv. mathematics | machine learning | control system theory | digital signal

Processing

2013 - 2017 Bachelor of Science in Electrical Engineering

University of Central Punjab, Pakistan

Majors: electronics | control system | image processing | signal processing

Work Experience

Research

11/2020 - present **Doctoral Researcher**

Istituto Italiano di Tecnologia, Italy

Research Focus: 3D scene perception from single and multi-modalities

07/2019 -10/2020 Research Associate

CACTUS Lab, Information Technology University, Pakistan

Teaching

2017-2019 Teaching Assistant

Machine Learning (graduate course)

Calculus & Analytical Geometry (undergrad course)

Power System Analysis (undergrad course)

Industry

2011 - 2017 Associate Engineer

SUPARCO (national space agency of Pakistan)

Worked on anomaly detection & control activities of Pakistan's first communication

satellite (Paksat-1R)

Programming Skills

Python: Pytorch | Numpy | Pandas | OpenCV | Keras | TensorFlow

3D Libs. mmdetection3D | Open3D | pytorch3D

Others: C++ | MATLAB | Blender

Publications

- 2022 **Ahmad J.**, Taiana M., Toso M., James S., Del Bue A., 2022, May. Multi-view 3D objects localization from street-level scenes. In 21st International Conference on Image Analysis and Processing. Springer. [paper link] [code]
- 2022 Castro E., Rebelo A., Rio Torto I., Capozzi L., Ferreira MF, Goncalves T., **Ahmad J.**, Daoudi N., Beco S., Ferreira PM, Moreira G. Fill in the Blank for Fashion Complementary Outfit Product Retrieval: VISUM Summer School Competition. Journal on Machine Vision and Applications, Vol. 34, (no. 1), pp. 1-15 DOI 10.1007/s00138-022-01359-x
- 2020 **Ahmad J.**, Shamshad F., Maqbool J., Ahmed A, 2020. Deep unsupervised deblurring approach for improving crops disease classification. In CVPR Workshop on Agriculture-Vision. [workshop link] [slides] [code]

Summer Schools

- Jul 2023 International Computer Vision Summer School ICVSS 2023
 School Theme: From Perception to Action
 Program: 30 hours of lectures from world well-known experts in the field
- Jul 2021 Vision Understanding and Machine Intelligence VISUM 2021

 Program: lectures | coding sessions | project competition | panel discussions

 Awarded: Best project team for achieving the highest prediction accuracy in competition titled 'to predict the complementary products in an outfit'. [presentation link]
- Jul 2020 Easter European Machine Learning Summer School EEML 2020
 Program: lectures | coding session | panel discussions | poster presentations
 Awarded: Best unconference research proposal for 3D historic landmark reconstruction.

 [presentation link]
- Aug 2020 Oxford Machine Learning Summer School OxML 2020 Program: lectures | coding session | unconference sessions

Awards & Prizes

Ranked 1^{st} in the competition by VISUM 2021 and EEML 2020

Fellowship granted by Information Technology University, Pakistan

Ranked 1st among all the faculties in BS final year project

Ranked 1^{st} for designing soccer ball robot competition 'robo-sprint 2014' held at CASE University, Pakistan

2008 - 2011 Scholarship granted by SUPARCO (national space agency of Pakistan)

Community Service

I am sensitive to the themes regarding barriers to education and learning in a discriminated portion of society. I was a member of the Akhuwat Foundation, Pakistan, which is dedicated to charity fundraising ideas.