

Javed Ahmad

Research Interests:

3D scene understanding | 3D objects localization | deep learning | multimodal learning

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 | Controls | Signal Processing
- 2013 – 2017 **Bachelor of Science in Electrical Engineering**
University of Central Punjab, Pakistan (CGPA - 3.50/4)
Majors: Electronics | Controls | Image Processing | Signal Processing
- 2008 – 2011 **Diploma of Associate Engineer in Electronics**
SUPARCO Institute of Technical Training, Pakistan (Score - 82.5%)

Work Experience

Research

- 11/2020 – present **Doctoral Researcher**
Istituto Italiano di Tecnologia, Italy
Research Focus: 3D object detection and localization 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 - 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 | project discussions
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 1st** 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 1st 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.