

Kamran Janjua

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EDUCATION

University of Alberta

Masters of Science in Computing Science, CGPA 3.80/4.00

Supervisor [Prof. Martha White](#)

Thesis [Online Predictions, RL and Water Treatment: A GVF Story](#)

Edmonton, Canada

Sept. 2021 – Jun 2023

National University of Sciences and Technology (NUST)

Bachelors of Science in Computer Science, CGPA 3.72/4.00

Islamabad, Pakistan

Sept. 2016 – Jun 2020

PUBLICATIONS ([GOOGLE SCHOLAR](#))

A. Ghasemabadi, **K. Janjua**, M. Salameh, C. Zhou, F. Sun, Di Niu
CascadedGaze: Efficiency in Global Context Extraction for Image Restoration

[Paper](#) / [Code](#)
TMLR'24

K. Janjua, H. Shah, M. White, E. Miah, M.C. Machado, A. White
GVFs in the Real World: Making Predictions Online for Water Treatment

[Paper](#) / [Code](#)
MLJ'23

Y. Hou, **K. Janjua**, J. Kannala, A. Solin
Movement-Induced Priors for Deep Stereo

[Paper](#) / [Code](#)
ICPR'20

S. Nawaz, **K. Janjua**, I. Gallo, A. Mahmood, A. Calefati, F. Shafait
Do Cross Modal Systems Leverage Semantic Relationships?

[Paper](#)
ICCV'19

K. Janjua, S. Nawaz, I. Gallo, A. Mahmood, A. Calefati
Deep Latent Space Learning for Cross-Modal Mapping of Audio and Visual Signals

[Paper](#) / [Code](#)
DICTA'19

K. Janjua, A. Calefati, S. Nawaz, I. Gallo
Gitloss for Deep Face Recognition

[Paper](#) / [Code](#)
BMVC'18

WORK EXPERIENCE

Edmonton Research Centre (ERC), Huawei Technologies Canada Co. Ltd

Jun 2023 – Present

Researcher

- I am working on designing and optimizing low-level computer vision algorithms to run on mobile hardware, mainly related to mobile camera pipelines.
- My work focuses on designing methods, and algorithms for online motion, and video understanding for various tasks such as video restoration, interpolation, and prediction.

Qatar Computing Research Institute (QCRI)

Jan 2021 – Aug 2021

Research Intern

[Advisor](#) [Prof. Hassan Sajjad](#)

- I worked on understanding how neurons in a deep neural network (either individually or combined to form groups) work towards reaching a decision from input to the output.
- The work was solely focused on analyzing how a trained architecture's internal state can be explained by mapping it to high-level concepts instead of attributing features.

Machine Learning Research Group, Aalto University

Jun 2019 – Nov 2019

Visiting Research Intern

[Advisor](#) [Prof. Arno Solin](#)

- I worked on depth estimation from unstructured multi-view image pose pairs. The task was to utilize cheap hardware on mobile devices and estimate depth following a stereo setup.
- We worked on lifting the restriction of 6dof pose information as part of ego-motion for depth estimation tasks since it is not generally available on smartphones.

Applied Recognition Technology Laboratory, University of Insubria

Mar 2018 – Sept 2018

Visiting Research Intern

[Advisor](#) [Prof. Ignazio Gallo](#)

- I worked on discriminatory embedding of two different modalities onto a shared latent space. Contemporary approaches employ multiple networks for each modality without working to capture the semantics between them, my work focused on exploring semantic relationships in the shared latent space for improved correlation and retrieval results.

TEACHING EXPERIENCE

CMPUT 267 - Machine Learning I

Fall 2021, Winter 2022

University of Alberta, Edmonton, Canada

Introduction to Machine Learning

Winter 2020

National University of Sciences and Technology (NUST), Islamabad, Pakistan

Data Structures and Algorithms

Fall 2018

National University of Sciences and Technology (NUST), Islamabad, Pakistan

TECHNOLOGIES ([GITHUB](#))

Backend — Python, C++, SQL

Deep Learning/Machine Learning — PyTorch, Tensorflow, JAX

Tools — Git, SLURM, Bash, Linux Server Management, AWS, GCP

REVIEW EXPERIENCE

ICLR 2025, AAAI PC Member 2025, NeurIPS 2024, CVPR 2024

REFERENCES

Prof. Martha White — Associate Professor, University of Alberta, Edmonton, Canada — whitem@ualberta.ca

Prof. Hassan Sajjad — Associate Professor, Dalhousie University, Halifax, Canada — hsajjad@dal.ca

Prof. Adam White — Assistant Professor, University of Alberta, Edmonton, Canada — amw8@ualberta.ca

Dr. Mohammad Salameh — Principal Scientist, Huawei Technologies, Canada — mohammad.salameh@huawei.com