Amirhossein Kardoost

Skype: AmirhosseinKardoost

Websites: LinkedIn, Personal Website



Education University of Mannheim

Ph.D., Computer Science, Mannheim, Germany, 2017 - 2021

Saarland University

M.Sci., Computer Science, Saarbrücken, Germany, 2013 - 2017

Institute for Advanced Studies in Basic Sciences (IASBS) B.Eng., Information Technology, Zanjan, Iran, 2008 - 2012

Research Interests Machine Learning and Pattern Recognition

Image Analysis and Computer Vision Video Object and Motion Segmentation Alignment of Electron Microscopy Images

Work Experience Software Developer

European XFEL, Schenefeld, Germany

February. 2021 - Now

Research Assistant Experience Estimation of Texture Orientation

Fraunhofer Institute for Nondestructive Testing (IZFP)

Saarbrücken, Germany

January.2015 - December.2015

Mobia Project

German Research Center for Artificial Intelligence (DFKI)

Saarbrücken, Germany

January.2014 - December.2014

3D Reconstruction of Visual Information

Max-Planck-Institute for Informatics (MPI)

Saarbrücken, Germany May.2013 - February.2014

Theses

Ph.D.'s Thesis

Video Object and Motion Segmentation

Projects Implemented in C++, CUDA, MATLAB, Python, and PyTorch

Master's Thesis

Alignment of Tilt-Series by Non-Convex Optimization

Implemented in C++

Bachelor's Thesis

Machine vision - Detection and Recognition of Face with **OpenCV** Library Implemented in **C++**

Publications

[1] Higher-Order Multicuts for Geometric Model Fitting

and Motion Segmentation

Evgeny Levinkov*, **Amirhossein Kardoost***, Bjoern Andres, Margret Keuper TPAMI Journal 2022

[2] Solving Minimum Cost Lifted Multicut Problems by Node Agglomeration

Amirhossein Kardoost and Margret Keuper

ACCV 2018

Project Website

[3] Object Segmentation Tracking from Generic Video Cues

Amirhossein Kardoost, Sabine Müller, Joachim Weickert, Margret Keuper ICPR 2020

YouTube Link

[4] Self-supervised Sparse to Dense Motion Segmentation

Amirhossein Kardoost, Kalun Ho, Peter Ochs, Margret Keuper

ACCV 2020

[5] Uncertainty in Minimum Cost Multicuts for Image and Motion Segmentation

Amirhossein Kardoost and Margret Keuper

UAI 2021

[6] A Two-Stage Minimum Cost Multicut Approach to Self-Supervised

Multiple Person Tracking

Kalun Ho, Amirhossein Kardoost, Franz-Josef Pfreundt, Janis Keuper,

Margret Keuper

ACCV 2020

Paper Reviewer CVPR 2021, 2022

ICCV 2021 AAAI 2021 BMVC 2020

Summer School International Computer Vision Summer School (ICVSS)

July.2019, Sicily, Italy

Visiting Researcher Max-Planck-Institute for Informatics (MPI)

Computer Vision Group

January. 2019 - February. 2019, Saarbrücken, Germany

Honors and Awards Rank 2 in Computer Science Department of (IASBS)

(Among top 10% of Class)

Zanjan, Iran May.2012

50% Tuition Scholarship from Tagliatela College of Engineering

Boston, USA September.2012

Computer Skills Machine Learning Libraries

• PyTorch,

• Keras,

• TensorFlow

Programming Languages

• C,

• C++,

• Python

• C#,

• MATLAB,

Web Developement

• HTML, CSS, Javascript, jQuery, EJS, Node.js

Database Management System

- MySQL
- PostgreSQL

Programming Libraries

- OpenCV,
- OpenGL

Language Skills English (Fluent)

German (Intermediate)