

Amirhossein Kardoost

Skype: AmirhosseinKardoost

Websites: [LinkedIn](#), [Personal Website](#)

Education

University of Siegen

Ph.D. Student, Siegen, Germany, May, 2022-Now

Dissertation submitted

University of Mannheim

Ph.D. Student, Mannheim, Germany, 2017 - May, 2022

University of Mannheim

Scientific Researcher, 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

Video Object and Motion Segmentation

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

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
Code

[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
Code

[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

[7] Optimizing Edge Detection for Image Segmentation with Multicut Penalties
Steffen Jung, Sebastian Ziegler, **Amirhossein Kardoost**, Margret Keuper
GCPR 2022

Paper Reviewer	CVPR 2021, 2022, 2023 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 <ul style="list-style-type: none"> • PyTorch, • Keras, • TensorFlow Programming Languages <ul style="list-style-type: none"> • C, • C++, • Python, • C# Web Development <ul style="list-style-type: none"> • HTML, CSS, Javascript, jQuery, EJS, Node.js Database Management System <ul style="list-style-type: none"> • MySQL, • PostgreSQL Programming Libraries <ul style="list-style-type: none"> • OpenCV, • OpenGL
Language Skills	English (Fluent) German (Intermediate)