## Amirhossein Kardoost

amirhk-dev.github.io LinkedIn | Google Scholar

## Education

University of Siegen Ph.D. Computer Science 05/2022-02/2023, Siegen, Germany

University of Mannheim Researcher Ph.D. Student 08/2017-04/2022, Mannheim, Germany

Saarland University
M.Sc. Computer Science
03/2013-07/2017, Saarbrücken, Germany

Institute for Advanced Studies in Basic Sciences (IASBS) B.Eng. Information Technology 09/2008-08/2012, Zanjan, Iran

## Work Experience

# European XFEL

Software Developer-with a focus on AI and Computer Vision 02/2021-Now, Schenefeld, Germany

### Fraunhofer Institute (IZFP)

Research Assistant, Estimation of Texture Orientation on Fibers 01/2015-12/2015, Saarbrücken, Germany

# ${\bf German\ Research\ Center\ for\ Artificial\ Intelligence\ (DFKI)}$

Research Assistant, Mobia Project 01/2014-12/2014, Saarbrücken, Germany

### Max-Planck-Institute for Informatics (MPI)

Research Assistant, 3D Reconstruction of Visual Information 05/2013-02/2014, Saarbrücken, Germany

## Theses

#### Ph.D.'s Thesis

Minimum Cost Multicuts for Image and Motion Segmentation

#### Master's Thesis

Alignment of Tilt-Series by Non-Convex Optimization

#### Bachelor's Thesis

Face Detection and Recognition with OpenCV Library

## **Publications**

[1] E. Levinkov\*, <u>A. Kardoost\*</u>, B. Andres, M. Keuper

Higher-Order Multicuts for Geometric Model Fitting and Motion Segmentation TPAMI'22

[2] A. Kardoost and M. Keuper

Uncertainty in Minimum Cost Multicuts for Image and Motion Segmentation  $\rm UAI'21$ 

[3] A. Kardoost, K. Ho, P. Ochs, M. Keuper

Self-supervised Sparse to Dense Motion Segmentation ACCV'20

[4] <u>A. Kardoost,</u> S. Müller, J. Weickert, M. Keuper

Object Segmentation Tracking from Generic Video Cues ICPR'20

[5] A. Kardoost and M. Keuper

Solving Minimum Cost Lifted Multicut Problems by Node Agglomeration ACCV'18

[6] K. Ho, A. Kardoost, F.-J. Pfreundt, J. Keuper, M. Keuper

A Two-Stage Minimum Cost Multicut Approach to Self-Supervised

Multiple Person Tracking

ACCV'20

[7] S. Jung, S. Ziegler, A. Kardoost, M. Keuper

Optimizing Edge Detection for Image Segmentation with Multicut Penalties GCPR'22

# Academic Activities Reviewing Papers in CVPR, ICCV, AAAI, BMVC

Summer School participation in International Computer Vision Summer School (ICVSS) 07/2019, Sicily, Italy

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

Computer Vision Group

01/2019-02/2019, Saarbrücken, Germany

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

(Among top 10% of Class) 05/2012, Zanjan, Iran

50% Tuition Scholarship from Tagliatela College of Engineering

09/2012, Boston, USA

# Computer Skills Machine Learning

• PyTorch, Keras, TensorFlow

### **Programming Languages**

• Python, C++, C#

### Web Developement

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

### **Database Management System**

• MySQL, PostgreSQL

### **Programming Libraries**

• OpenCV, OpenGL

Language Skills English (Fluent)

German (Intermediate)