



Christian Reinbacher

Curriculum Vitae

Education

- 2010–2014 **PhD in Computer Science**, *Graz University of Technology*.
2007–2009 **Telematics Master**, *Graz University of Technology*.
2003–2007 **Telematics Bachelor**, *Graz University of Technology*.

PhD Thesis

- Title *Instance-Specific Pose Estimation from Silhouette Information*
Supervisors Professor Horst Bischof & Professor Edmond Boyer

Experience

- 2015–Present **Post Doc University Assistant**, INSTITUTE FOR COMPUTER GRAPHICS AND VISION, Graz.
Developing novel optimization methods for dense image matching and image reconstruction from neuromorphic cameras.
- 2010–2014 **University Assistant**, INSTITUTE FOR COMPUTER GRAPHICS AND VISION, Graz.
Pursued a PhD in computer science. Taught "Introduction to scientific work" with over 300 participants.

Awards

- 2015 Best paper award for *Interactive Segmentation of Rock-Art in High-Resolution 3D Reconstructions*
- 2011 GIT-Price of the Austrian Electrotechnical Association for Master's Thesis *Semi Automatic Segmentation of Articular Cartilage using Variational Methods*

Skills and Expertise

- Research Convex Optimization, Variational Methods, Computational Photography, Camera Calibration, Real-Time Computer Vision
- Programming C/C++, Python, Matlab, CUDA

Muchargasse 35 – A-8010 Graz

☎ (43) 699 81 97 48 77 • ✉ christian.reinbacher@tugraz.at

🌐 Website

Languages

German Mother tongue
English Fluent

Talks

- 2016 Invited talk at the Robotics and Perception Group of ETH Zurich
- 2016 Oral Presentation at the Computer Vision Winter Workshop in Lasko, Slovenia
- 2015 Oral Presentation at the Digital Heritage Conference in Granada, Spain
- 2015 Invited talk at Wintergraph in Altenmarkt, Austria
- 2014 Defense of my PhD Thesis in Graz, Austria
- 2013 Demo Presentation at the International Conference on Computer Vision in Sidney, Australia
- 2012 Oral Presentation at the International Conference on Pattern Recognition in Tsukuba, Japan
- 2011 Oral Presentation at the Scandinavian Conference on Image Analysis in Ystad, Sweden

Publications

- 2016 **Solving Dense Image Matching in Real-Time using Discrete-Continuous Optimization**, *Computer Vision Winter Workshop*.
- 2015 **Multi-scale 3D rock-art recording**, *Digital Applications in Archaeology and Cultural Heritage*.
- 2015 **Interactive Segmentation of Rock-Art in High-Resolution 3D Reconstructions**, *Digital Heritage International Congress*.
- 2015 **Mobile User Interfaces for Efficient Verification of Holograms**, *IEEE Virtual Reality*.
- 2015 **Learning Depth Calibration of Time-of-Flight Cameras**, *British Machine Vision Conference*.
- 2014 **Instance-Specific Pose Estimation from Silhouette Information**, *PhD Thesis*.
- 2014 **aTGV-SF: Dense Variational Scene Flow through Projective Warping and Higher Order Regularization**, *International Conference on 3D Vision*.
- 2013 **Image Guided Depth Upsampling using Anisotropic Total Generalized Variation**, *International Conference on Computer Vision*.
- 2012 **Fast Variational Multi-View Segmentation through Backprojection of Spatial Constraints**, *Image and Vision Computing*.
- 2012 **RoNect: Hand Mounted Depth Sensing Using a Commodity Depth Camera**, *International Conference on Pattern Recognition*.
- 2012 **Fast Pose Estimation from Silhouettes in Video Sequences**, *Computer Vision Winter Workshop*.

Muchargasse 35 – A-8010 Graz

☎ (43) 699 81 97 48 77 • ✉ christian.reinbacher@tugraz.at

🌐 Website

2/3

- 2011 **Vision-Based Quality Inspection in Robotic Welding** , *Austrian Workshop on Pattern Recognition*.
- 2011 **Catadioptric Silhouette-Based Pose Estimation from Learned Models** , *Scandinavian Conference on Image Analysis*.
- 2010 **Pose Estimation of Known Objects by Efficient Silhouette Matching** , *International Conference on Pattern Recognition*.
- 2010 **Variational Segmentation of Elongated Volumetric Structures** , *IEEE Conference on Computer Vision and Patter Recognition*.
- 2009 **Semi Automatic Segmentation of Articular Cartilage using Variational Methods** , *Master's Thesis*.

Muchargasse 35 – A-8010 Graz

☎ (43) 699 81 97 48 77 • ✉ christian.reinbacher@tugraz.at

🌐 Website