Ali Osman Ulusoy

Max-Planck Institute for Intelligent Systems
Spemannstrasse 41
72076 Tübingen, Germany

+49 17680668123
aliosman.ulusoy@gmail.com
http://ps.is.tue.mpg.de/person/ulusoy

Current position

Post-doctoral researcher, MPI for Intelligent Systems — Tübingen, Germany

- Advisors: Michael J. Black and Andreas Geiger

Education

Ph.D. in Engineering, Brown University — Providence, RI, 2014

- Thesis title: Probabilistic and Volumetric Reconstruction of Time-Varying 3-d Scenes from Multi-view Images
- Thesis committee: Prof. Joseph Mundy (advisor), Prof. Gabriel Taubin, Prof. James Hays

Sc.M. in Applied Mathematics, Brown University — Providence, RI, 2011

B.S. in Computer Engineering, Bilkent University — Ankara, Turkey, 2011

Publications

Patches, Planes and Probabilities: A Non-local Prior for Volumetric 3D Reconstruction
Ali Osman Ulusoy, Michael J. Black, Andreas Geiger
IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) 2016

Towards Probabilistic Volumetric Reconstruction using Ray Potentials
Ali Osman Ulusoy, Andreas Geiger, Michael J. Black
International Conf. on 3D Vision (3DV) (Oral Presentation) (Best Paper Award) 2015

Evaluation of Feature-Based 3-d Registration of Probabilistic Volumetric Scenes
Maria I. Restrepo,, **Ali Osman Ulusoy**, Joseph L. Mundy
ISPRS Journal of Photogrammetry and Remote Sensing 2014

TrueClick: Automatically Distinguishing Trick Banners from Genuine Download Links
Sevtap Duman, Kaan Onarlioglu, **Ali Osman Ulusoy**, William Robertson, Engin Kirda
Proceedings of the Annual Computer Security Applications Conference (ACSAC) 2014

Image-based 4-d Modeling Using 3-d Change Detection
Ali Osman Ulusoy, Joseph L. Mundy
European Conf. on Computer Vision (ECCV) 2014

Dynamic Probabilistic Volumetric Models
Ali Osman Ulusoy, Octavian Biris, Joseph L. Mundy
International Conf. on Computer Vision (ICCV) 2013

High Resolution Surface Reconstruction from Multi-view Aerial Imagery
Fatih Calakli, **Ali Osman Ulusoy**, Maria Restrepo, Gabriel Taubin, Joseph L. Mundy
3DIMPVT (Oral Presentation) 2012

Characterization of 3-D Volumetric Probabilistic Scenes for Object Recognition
Maria I Restrepo, Brandon A Mayer, **Ali Osman Ulusoy**, Joseph L Mundy
IEEE Journal of Selected Topics in Signal Processing 2012

Robust One-Shot 3-d Scanning using Loopy Belief Propagation
Ali Osman Ulusoy, Fatih Calakli and Gabriel Taubin
Applications of Computer Vision in Archaeology workshop in conjunction with IEEE Conf. on Computer Vision and Pattern Recognition (CVPR) (Oral Presentation) 2010

One-Shot Scanning using De Bruijn Spaced Grids
Ali Osman Ulusoy, Fatih Calakli and Gabriel Taubin
3-D Digital Imaging and Modeling (3DIM) workshop in conjunction with International Conf. on Computer Vision 2009

Industry Experience

Research scientist at Vision Systems Inc. (Providence, RI), a start-up company lead by Prof. Joseph Mundy. My research focused on 3D reconstruction of reflective materials. Summer 2014.

Research intern at Vistek (Istanbul, Turkey), a spin-off machine vision company led by Prof. Aytül Erçil from Sabanci University, Turkey. I worked on OCR for automated quality control. Summer 2007.

Software engineering intern at Siemens (Istanbul, Turkey). Summer 2006.

Invited Talks and Posters

Towards Probabilistic Volumetric Reconstruction using Ray Potentials

- International Workshop on Computer Vision 2016
- University of North Carolina at Chapel Hill 2015

Probabilistic and Volumetric Reconstruction of Time-Varying 3-d Scenes

- MPI Intelligent Systems - ETH Learning Systems Workshop 2015
- Harvard University 2015
- GE Global Research Center 2014

Image-based 4-d Modeling Using 3-d Change Detection

- MIT 2014
- Vision Systems Inc. 2013

Probabilistic and Volumetric Framework for Reconstructing General Dynamic 3-d Scenes (Poster),

- Greater New York Area Multimedia and Vision Meeting 2013

Honors and Awards

International Conf. on 3D Vision Best Paper Award 2015
NVIDIA Hardware Donation - one Nvidia Tesla K20c 2013
Brown University Graduate Fellowship 2008
Bilkent University Undergraduate Fellowship 2005-2008

Computer Skills

Programming: C/C++, OpenCL, Python, MATLAB, Java, LaTeX
Software libraries: VXL, OpenCV

Academic Service	Reviewer, European Conf. on Computer Vision (ECCV)	2016
	Reviewer, ACM SIGGRAPH ASIA	2016
	Reviewer, IEEE Conf. on Computer Vision and Pattern Recognition (CVPR)	2016
	Reviewer, International Conf. on Computer Vision (ICCV)	2015
	Reviewer, International Journal of Computer Vision (IJCV)	2015
	Reviewer, Image and Vision Computing (IVC)	2014
	Reviewer, Image and Vision Computing (IVC)	2013