

# Aljoša Ošep

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## EDUCATION

### RWTH Aachen University, Aachen, Germany

- Ph.D. in Computer Science Nov 2013 – now
  - Thesis: Vision-based Category Agnostic Object Tracking for Mobile Robots and Intelligent Vehicles
  - Advisor: Prof. Dr. Bastian Leibe
  - Focus: Computer Vision and Machine Learning

### University of Bonn, Bonn, Germany

- MSc. in Computer Science Sep 2010 – Mar 2013
  - Thesis: Multi-View 3D Reconstruction of Highly-Specular Objects
  - Focus: Computer Vision, Robotics, Computer Graphics

### University of Maribor, Maribor, Slovenia

- BSc. in Computer Science Sep 2007 – Sep 2010

## RESEARCH EXPERIENCE

### RWTH Aachen University

- Graduate Research Student (Ph.D.), Computer Vision Group Nov 2013 – now
  - Supervisor: Prof. Dr. Bastian Leibe
  - Focus: Vision-based multi-object tracking and object discovery

### University of Bonn

- Graduate Research Student, Computer Graphics Group Apr 2013 – Aug 2013
  - Supervisors: Prof. Dr. Andreas Weber and Prof. Dr. Dominik L. Michels
  - Focus: Physics-based modelling of material deformation
- Undergraduate Research Student, Computer Graphics Group May 2011 – Mar 2013
  - Supervisors: Prof. Dr. Reinhard Klein and Dr. Michael Weinmann
  - Focus: 3D reconstruction, image-based material retrieval
- Undergraduate Research Student, Autonomous Intelligent Systems Group Sep 2011 – Apr 2012
  - Supervisors: Prof. Dr. Sven Behnke
  - Focus: Teaching assistant for the Cognitive Robotics course

## PUBLICATIONS

- A. Ošep\*, P. Voigtlaender\*, J. Luiten and B. Leibe, “Large-Scale Object Discovery and Detector Adaptation from Unlabeled Video,” Arxiv Preprint: arXiv:1712.08832 Dec 2017.
- A. Ošep and W. Mehner and P. Voigtlaender and B. Leibe, “Track, then Decide: Category-Agnostic Vision-based Multi-Object Tracking,” in *ICRA*, Brisbane, Australia, May 2018.
- A. Ošep and W. Mehner and M. Mathias and B. Leibe, “Combined Image- and World-Space Tracking in Traffic Scenes,” in *ICRA*, Singapore, Singapore, May 2017.
- D. Klostermann and A. Ošep and J. Stueckler and B. Leibe, “Unsupervised Learning of Shape-Motion Patterns for Objects in Urban Street Scenes,” in *BMVC*, York, UK, Sep 2016.
- D. Kochanov and A. Ošep and J. Stueckler and B. Leibe, “Scene Flow Propagation for Semantic Mapping and Object Discovery in Dynamic Street Scenes,” in *IROS*, Daejeon, South Korea, Oct 2016.
- A. Ošep and A. Hermans and F. Engelmann and D. Klostermann and B. Leibe, “Multi-Scale Object Candidates for Generic Object Tracking in Street Scenes,” in *ICRA*, Stockholm, Sweden, May 2016.
- D. Mitzel and J. Diesel, A. Ošep and U. Rafi and B. Leibe, “A Fixed-Dimensional 3D Shape Representation for Matching Partially Observed Objects in Street Scenes,” in *ICRA*, Seattle, USA, May 2015.
- M. Weinmann and A. Ošep and R. Ruiters and R. Klein, “Multi-View Normal Field Integration for 3D Reconstruction of Mirroring Objects,” in *ICCV*, Sydney, Australia, Dec 2013.
- M. Weinmann and R. Ruiters and A. Ošep and C. Schwartz and R. Klein, “Fusing Structured Light Consistency and Helmholtz Normals for 3D Reconstruction,” in *BMVC*, Surrey, UK, Sep 2012.

<b>AWARDS &amp; SCHOLARSHIPS</b>	<ul style="list-style-type: none"> <li>▪ National (Slovenian) scholarship for gifted students</li> </ul>	Sep 2008 – Mar 2013
<b>LANGUAGES</b>	<ul style="list-style-type: none"> <li>▪ Slovenian: Native language.</li> <li>▪ English: Fluent (speaking, reading, writing).</li> <li>▪ German: Intermediate (reading); basic (speaking, writing).</li> </ul>	
<b>EXPERIENCES</b>	C++, Python, MATLAB, OpenCV, Point Cloud Library, Tensorflow, Robot Operating system (ROS), etc.	
<b>RESEARCH INTERESTS</b>	<p>My research interest lie at the intersection between cognitive robotics and computer vision:</p> <ul style="list-style-type: none"> <li>▪ Scene understanding: Multi-object tracking, semantic scene and instance segmentation, SLAM</li> <li>▪ Life-long learning: Object discovery, learning via scene exploration, weakly-supervised and unsupervised learning</li> </ul>	
<b>INTERESTS</b>	Travelling, Football, Rock Climbing.	
<b>REFERENCES</b>	<ul style="list-style-type: none"> <li>▪ <b>Prof. Dr. Bastian Leibe</b> RWTH Aachen University University Mies-van-der-Rohe Str. 15, 52074 Aachen, Germany leibe@vision.rwth-aachen.de • +49 (241) 80-22731</li> </ul>	

[CV compiled on 2018-03-26]