

CURRICULUM VITAE (last update: July 7th, 2021)

TOMÁŠ HODAŇ

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Education

PhD degree in computer vision (2013 – 2020, defended in 2021)

Czech Technical University in Prague, Faculty of Electrical Engineering

Doctoral thesis: *Pose Estimation of Specific Rigid Objects*

Supervisor: Prof. Jiří Matas, reviewers: Prof. Vincent Lepetit, Prof. Markus Vincze, Dr. Slobodan Ilic

Master's degree (with honours) in information technology (2010 – 2013)

Brno University of Technology, Faculty of Information Technology

Master's thesis: *Specular Reflection Detection and Removal From Image Sequences*

Supervisors: Dr. Robby T. Tan and Prof. Adam Herout

Exchange study programme in game and media technology (2010 – 2011)

Utrecht University, Faculty of Science

Bachelor's degree in information technology (2007 – 2010)

Brno University of Technology, Faculty of Information Technology

Bachelor's thesis: *Web Portal for GPS Tracks Processing*

Work experience

Facebook Reality Labs – Research scientist (November 2020 – present)

Redmond (USA), working on hand and object tracking

Google – PhD intern (November 2018 – May 2019)

Munich (Germany), working with Stefan Hinterstoisser

Microsoft Research – Research intern (June – August 2018)

Redmond (USA), working with Vibhav Vineet, Sudipta Sinha and Brian Guenter

DARWIN FP7 EU project – Computer vision researcher (2013 – 2015)

Czech Technical University in Prague, Faculty of Electrical Engineering

Task: Design and implementation of the vision module for an assembly robot

SRS FP7 EU project – Computer vision researcher (2011 – 2012)

Brno University of Technology, Faculty of Information Technology

Task: Research and development of a domestic robot supporting elderly people

Enthusio.cz – Owner, developer, designer (2005 – 2012)

A company focused on web development

Publications

T. Hodaň, D. Baráth, J. Matas, *EPOS: Estimating 6D Pose of Objects with Symmetries*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2020, Seattle, USA

Y. Patel, **T. Hodaň**, J. Matas, *Learning Surrogates via Deep Embedding*, European Conference on Computer Vision (ECCV) 2020, Glasgow, Scotland

T. Hodaň, M. Sundermeyer, B. Drost, Y. Labbé, E. Brachmann, F. Michel, C. Rother, J. Matas, *BOP Challenge 2020 on 6D Object Localization*, European Conference on Computer Vision Workshops (ECCVW) 2020, Glasgow, Scotland

T. Hodaň, V. Vineet, S. N. Sinha, R. Gal, E. Shalev, J. Hanzelka, T. Connell, P. Urbina, B. Guenter, *Photorealistic Image Synthesis for Object Instance Detection*, IEEE International Conference on Image Processing (ICIP) 2019, Taipei, Taiwan

T. Hodaň, F. Michel, E. Brachmann, W. Kehl, A. G. Buch, D. Kraft, B. Drost, J. Vidal, S. Ihrke, X. Zabulis, C. Sahin, F. Manhardt, F. Tombari, T.-K. Kim, J. Matas, C. Rother, *BOP: Benchmark for 6D Object Pose Estimation*, European Conference on Computer Vision (ECCV) 2018, Munich, Germany

T. Hodaň, P. Haluza, Š. Obdržálek, J. Matas, M. Lourakis, X. Zabulis, *T-LESS: An RGB-D Dataset for 6D Pose Estimation of Texture-less Objects*, IEEE Winter Conference on Applications of Computer Vision (WACV) 2017, Santa Rosa, USA

T. Hodaň, J. Matas, Š. Obdržálek, *On Evaluation of 6D Object Pose Estimation*, European Conference on Computer Vision Workshops (ECCVW) 2016, Amsterdam, The Netherlands

T. Hodaň, X. Zabulis, M. Lourakis, Š. Obdržálek, J. Matas, *Detection and Fine 3D Pose Estimation of Texture-less Objects in RGB-D Images*, IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2015, Hamburg, Germany

T. Hodaň, D. Damen, W. Mayol-Cuevas, J. Matas, *Efficient Texture-less Object Detection for Augmented Reality Guidance*, IEEE International Symposium on Mixed and Augmented Reality Workshops (ISMARW) 2015, Fukuoka, Japan

T. Hodaň, *Web Portal for GPS Tracks Processing*, In Proceedings of Student EEICT 2010, Brno University of Technology, Czech Republic

Awards

Dean's award for excellent Master's thesis (2013), Brno University of Technology

Teaching

Pattern Recognition and Machine Learning – a course at the Faculty of Electrical Engineering, Czech Technical University in Prague (2013/14, 2014/15, 2017/18)

Supervised students – Pavel Zedník (MSc. thesis, 2015), Pavel Haluza (Bc. thesis, 2017)

Other activities

Co-organized workshops on 6D object pose estimation – <http://cmp.felk.cvut.cz/sixd>
Organized at ICCV'15, ECCV'16, ICCV'17, ECCV'18, ICCV'19, ECCV'20

Co-organized challenges on 6D object pose estimation – <http://bop.felk.cvut.cz>