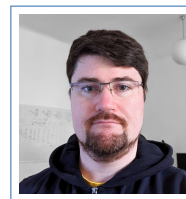


Tomáš Vojř

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Education

- 2005–2008 **Bachelor's degree**, *Czech Technical University in Prague, FEE*
Branch of Computer Science and Engineering
- 2008–2010 **Master's degree**, *Czech Technical University in Prague, FEE*
Branch of Computer Science and Engineering – System programming
- 2010–2018 **Doctoral degree**, *Czech Technical University in Prague, FEE*
Branch of Artificial Intelligence and Biocybernetics

Experience

International Stays

- Sep.→Dec. 2011 **Visiting Researcher**, *National Institute of Informatics in Tokyo, Japan*
Internship program, hosting professor Akihiro Sugimoto
Topic: Real time object tracking using different tracking modalities
- 2018–2020 **Research Associate**, *Cambridge University, United Kingdom*
at the Machine Intelligence Laboratory in the research group of prof. Roberto Cipolla
Topic: Vehicles semantic visual localization in urban scenes

Current Position

- 2020→now **Researcher**, *Czech Technical University in Prague, FEE, Czech Republic*
at the Center for Machine Perception in Visual Recognition Group of prof. Jiří Matas
Topic: Semantic scene understanding and anomaly detection for autonomous driving

Miscellaneous

- 2013–2017 **Technical Committee Member**, *Visual Object Tracking Challenge*
Co-founder and member of technical committee (votchallenge.net)
Organizer of workshops on major computer vision conferences
- 2011→now **Research for Industrial Partner**, *Toyota Motor Europe*
Long-term collaboration with an industrial partner within a University-Toyota contracts.
Three patent applications pending approval.

Awards

- 2013 Best paper: “*Robust Scale-adaptive Mean-Shift for Tracking*”, *SCIA*
- 2018 Dean's award for a prestigious Ph.D. dissertation
- 2021 Outstanding Reviewer – IEEE International Conference on Computer Vision (ICCV)
- 2023 Outstanding Reviewer – IEEE Computer Vision and Pattern Recognition (CVPR)

Invited Talks

- 2022 “Road Anomaly Detection by Generative and Discriminative Road Appearance Modelling”
at Workshop on Robust Understanding of Street Scenes Using Computer Vision
<https://www-ai.math.uni-wuppertal.de/~streetscenes/workshop/>

Students

2022-2023 Maroš Pechník *Semestral Project* → *Master's thesis*

Bibliometrics (collected in February 2024)

	WoS	Scopus	Google Scholar
H-index	17	19	19
Citations	3,792	4,633	6,586

Selected Publications

- [1] Ignas Budvytis*, Marvin Teichmann*, Tomáš Vojří*, and Roberto Cipolla. Large Scale Joint Semantic Re-localisation and Scene Understanding via Globally Unique Instance Coordinate Regression. In *British Machine Vision Conference (BMVC) 2019*, page 31. BMVA Press, 2019.
- [2] Claudio Caraffi, Tomáš Vojří, Jiří Trefný, Jan Šochman, and Jiří Matas. A system for real-time detection and tracking of vehicles from a single car-mounted camera. In *2012 15th International IEEE Conference on Intelligent Transportation Systems*, pages 975–982, 2012.
- [3] Matej Kristan, Jiri Matas, Aleš Leonardis, Tomáš Vojří, Roman Pflugfelder, Gustavo Fernandez, Georg Nebehay, Fatih Porikli, and Luka Čehovin. A Novel Performance Evaluation Methodology for Single-Target Trackers. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 38(11):2137–2155, Nov 2016.
- [4] Alan Lukezic, Tomáš Vojří, Luka Cehovin Zajc, Jiri Matas, and Matej Kristan. Discriminative Correlation Filter With Channel and Spatial Reliability. In *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017.
- [5] Tomáš Vojří, Jan Šochman, Rahaf Aljundi, and Jiří Matas. Calibrated Out-of-Distribution Detection with a Generic Representation. In *Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV) Workshops*, pages 4507–4516, October 2023.
- [6] Tomáš Vojří, Ignas Budvytis, and Roberto Cipolla. Efficient Large-Scale Semantic Visual Localization in 2D Maps. In *Proceedings of the Asian Conference on Computer Vision (ACCV)*, 2020.
- [7] Tomáš Vojří and Jiří Matas. Image-Consistent Detection of Road Anomalies as Unpredictable Patches. In *2023 IEEE/CVF Winter Conference on Applications of Computer Vision (WACV)*, pages 5480–5489, 2023.
- [8] Tomáš Vojří, Jana Noskova, and Jiri Matas. Robust Scale-adaptive Mean-shift for Tracking. *Pattern Recognition Letters*, 49:250–258, 2014.
- [9] Tomáš Vojří, Tomáš Šipka, Rahaf Aljundi, Nikolay Chumerin, Daniel Olmeda Reino, and Jiri Matas. Road Anomaly Detection by Partial Image Reconstruction with Segmentation Coupling. In *2021 IEEE/CVF International Conference on Computer Vision (ICCV)*, pages 15631–15640, 2021.