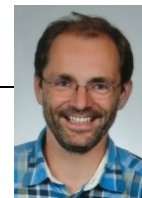# Jiří Matas

Born	6. 8. 1964, Prague
Address	Czech Technical University in Prague, Faculty of Electrical Engineering, Department of Cybernetics email: matas@fel.cvut.cz tel.: +420 603 140 180 WWW: http://cmp.felk.cvut.cz/~matas/

Education

2010 Prof.	Full professor, Head of the Visual Recognition Group, Center for Machine Perception, CTU Prague
2005 Doc.	Associate professor
1995 Ph.D.	PhD at the University of Surrey, UK
1987 Ing.	MSc. CTU Prague, Faculty of Electrical Engineering, with honours

Employment

Currently	**Professor -** Faculty of Electrical Engineering, CTU in Prague
2016	**Finland distinguished professor** (FiDiPro), Oulu and Tampere Universities
2006 - 2010	**Associate professor CTU in Prague,** Faculty of Electrical Engineering, Department of Cybernetics
2007	**Visiting professor,** EPFL Lausanne, Switzerland
2005 - 2006	**Visiting researcher,** CVSSP group, University of Surrey, United Kingdom
1997 – 2005	**Research fellow,** CTU in Prague**,** Faculty of Electric Engineering, Department of Cybernetics
1990 – 2001	**Research fellow,** CVSSP group, University of Surrey, UK
1987 - 1990	**Assistant CTU in Prague –** Faculty of Electrical Engineering, Department of Control
1986	**Statistics department at EDP Coimbra, Portugal –** two month internship IAESTE

Awards

2018	• **best paper award**, 3rd International Workshop on Robust Reading @ Asian Conf. on Comp. Vision, M. Busta, Y. Patel, J. Matas: E2E – an Unconstrained End-to-End Method form Multi-Language Scene Text.
2017	• **Attila Kuba prize**: D. Barath, J. Matas, and L. Hajder: Multi-H: Efficient Recovery of Tangent Planes in Stereo Images
2015	• **best paper award** at the Int. Conf. on Document Analysis and Recognition ICDAR 2015: L. Neumann, J. Matas: Efficient Scene Text Localization and Recognition with Local Character Refinement
2013	• **best paper award** at Image and Vision Computing New Zealand 2013: J. Pritts, O. Chum, J. Matas, Approximate Models for Fast and Accurate Epipolar Geometry Estimation
	• **best paper award** at Scandinavian Conference on Image Analysis 2013: T. Vojíř, J. Nosková, J. Matas, Robust Scale-Adaptive Mean-Shift for Tracking
	• with L. Neumann – **best student paper award** at ICDAR 2013, the 12th Int. Conference on Document Analysis and Recognition: On Combining Multiple Segmentations in Scene Text Recognition
	• PhD. thesis of Zdenek Kalal whom I co-supervised was awarded the **UK ICT Pioneers Prize** vin the "Technology Everywhere" category
2011	• MSc. thesis of L. Neumann whom I supervised got both the **Czech Master Thesis 2010 in Computer Science** and the **Porsche Engineering Awards.**
2010	• Outstanding Reviewer – CVPR 2010
2007	• **best paper award** at the Asian Conference on Computer Vision: J. Sochman, J. Matas: Learning A Fast Emulator of Binary Decision Process"
2005	• **best paper award** at the British Machine Vision Conference 2005: S. Obdržálek, Jiří Matas: Sub-linear Indexing for Large Scale Object Recognition
2002	• **best paper award** at the British Machine Vision Conference 2002: J. Matas et al. Robust Wide Baseline Stereo from Maximally Stable Extremal Regions

Publications, Citations.

Number of citations: Google Scholar ~ 37000,   Web of Science = 13 000 (excluding self-citations)
H-index.   Google Scholar = 68,   Web of Science = 43
Number of publications: > 250,   Selected journal publications:

- L. Neumann, J. Matas: Real-Time Lexicon-Free Scene Text Localization and Recognition. IEEE Trans. Patt. Anal. Mach. Intell. 38(9): 1872-1885 (2016) (IF 6.1)

- Dmytro Mishkin, Jiri Matas, Michal Perdoch: MODS: Fast and robust method for two-view matching. Computer Vision and Image Understanding 141: 81-93 (2015)
- A. Mikulík, M. Perdoch, O. Chum, J. Matas: Learning Vocabularies over a Fine Quantization. Int. J, of Computer Vision 103(1): 163-175 (2013)
- Rahul Raguram, Ondrej Chum, Marc Pollefeys, Jiri Matas, Jan-Michael Frahm: USAC: A Universal Framework for Random Sample Consensus. IEEE Trans. Pattern Anal. Mach. Intell. 35(8): 2022-2038 (2013) (IF 5.7)
- Z. Kalal, K. Mikolajczyk and J. Matas.Tracking-Learning-Detection, IEEE T. PAMI. 34(7): 1409-1422, July 2012 (IF 4.8)
- L. Ellis, N. Dowson, J. Matas, and R. Bowden. Linear regression and adaptive appearance models for fast simultaneous modelling and tracking. International Journal of Computer Vision (2011) 95:154-179
- J. Cech, J. Matas, M. Perdoch. Ecient Sequential Correspondence Selection by Cosegmentation. IEEE Trans. Pattern Analysis and Machine Intelligence. 32(9): 1568-1581, September 2010, (IF4.4)
- O. Chum, J. Matas. Large-Scale Discovery of Spatially Related Images. IEEE Trans. Patt, Analalysis and Mach. Intell. 32(2): 371-377, 2010 (IF 4.4)
- J. Sochman and J. Matas. Learning Fast Emulators of Binary Decision Processes. In International Journal of Computer Vision, 2009. (IF 5.4)

Grants (selected, 2008 – 2015)

- principle investigator, Czech Science Foundation grant „Centre of excellence in multimodal data processing",2012-
- partner lead, FP7 EU Project Maseltov (2012-2015)
- principle investigator, Czech Science Foundation grant – "Methods for Visual Recognition of Large Collections of Non-rigid Objects" (2008-2011), Evaluated "Excellent"
- partner lead, FP7 EU Project Darwin (2011-2015, "Dextrous Assembler Robot Working with embodied Intelligence")
- partner lead, FP7 EU project MASH (2010-2012, "Massive sets of heuristics")
- partner lead, DIPLECS (2007-2010, "Dynamic Interactive Perception-action LEarning in Cognitive Systems")

Service

- European Research Council (ERC), panel vice-chair PE6 Computer Science and Informatics (2011-2017)
- Program committee co-chair: ECCV 2004, 2016 (Core A), CVPR 2007 (Core A*),
- Czech Technical University, Scientific Council member (2010-)
- Charles University, Faculty of Mathematics, and Physics, Scientific Council member (2012-)
- Czech Technical University, Faculty of Electrical Engineering, Scientific Council member (2008-)
- Czech Science Foundation, panel member (2008-2014)
- Editorial board member, International Journal of Computer Vision [one of the top journals in the field](2010-)
- Associate Editor-in-Chief of IEEE Transactions on Pattern Analysis and Machine Intelligence (2009-2013)
- Evaluator, EU H2020, FP7, FP6 (collaborative research, Marie-Curie, Future and Emerging Technologies)
- Evaluator for grant agencies in Sweden, Switzerland, Hong Kong.

Industrial Collaboration (selected, 2008 – 2017)

2002 –	(active) **Toyota, Japan** – project leader „Object recognition for autonomous vehicles"
2013 – 2018	**TELMAX, Czech Republic** –project leader "Character detection on mobile devices"
2013 – 2015	**Merz, Czech Republic** – consultant, "Tracking and detection of people in videos"
2011 – 2013	**Samsung, South Korea** – project leader „Large-scale Image Retrieval"
2011 – 2013	**Samsung Research Labs, Poland** – project leader „Visual Tracking"
2003 – 2009	**Hitachi, Japan** – project leader „Face analysis"

Students

- Two of my students received the top "Czech Mind" prize of a PhD in Czech Republic (S. Obdžálek 2005 and L. Neumann 2018) and four Hlávka prize – top student at FEE CTU (D. Rozumnyi 2017, M. Šulc 2014, K. Lenc 2013, L. Neumann 2011),
- My PhD students L. Neumann and L. Zích received the prestigious Google Fellowship, the first in central+eastern Europe.
- My PhD student Andrej Mikulík was awarded the highly selective Microsoft Research Scholarship in 2010.

Patents, Spin-off

Patents   a co-inventor of international patents: WO/2007/026948 WO/2007/026951, US 20120308114 A1

Spin-off   co-founder of Eyedea Recognition, the first CTU co-owned spin-off company, http://www.eyedea.cz
Start-up   co-founder of Locksley CZ.