Curriculum Vitae: Dr. Jiří (George) Matas

Education and Academic Qualifications

1995	PhD degree from the University of Surrey. Advisor: Prof. J. Kittler.
1987	MSc degree (with honours) in electrical engineering.

Employment

2010-	Full Professor, Center for Machine Perception, CTU Prague, Czech Republic.
2006-2010	Reader, Center for Machine Perception, CTU Prague, Czech Republic.
2007	Visiting Professor, EPFL Lausanne, Switzerland
2005-2006	Visiting Researcher, CVSSP group, University of Surrey, UK.
1997-2005	Senior Researcher, Center for Machine Perception, Prague, Czech Republic.
1997-2001	I concurrently held two part-time positions, at the Centre for Vision, Speech and Signal Processing, U.of Surrey, UK; and Center for Machine Perception, Czech Technical University, Prague.
1991-1997	Research fellow, Centre for Vision, Speech and Signal Processing, U. of Surrey, UK.
1990	Visiting fellow, Centre for Vision, Speech and Signal Processing, U. of Surrey, UK.
1987-1990	Department of Control, Czech Technical University Prague, Czech Republic.
1986	Statistical Department of EDP Coimbra, Portugal. Two-month employment organised by the International Association For The Exchange Of Students For Technical Experience.

Awards

2010	L. Neumann's MSc thesis supervised by J. Matas won the Czech Master Thesis of Year 2010 in Informatics award.
2010	Outstanding Reviewer, CVPR 2010.
2009	K. Zimmermann's PhD thesis "Fast Learnable Methods for Object Tracking" supervised by J. Matas was awarded the prize for the "Best PhD dissertation in Czech Republic in the fields of cybernetics and informatics in 2008".
2007	The paper "J. Sochman, J. Matas: Learning A Fast Emulator of Binary Decision Process" was awarded the best paper prize at the Asian Conference on Computer Vision
2005	The Center for Machine Perception team that I was a member of finished second in the ICCV 2005 Contest
2005	The paper "J. Matas, S. Obdrzalek: Sub-linear Indexing for Large Scale Object Recognition" was awarded the best paper prize at the British Machine Vision Conference.
2004	"The Best Scientific Result" prize of the Czech Technical University Prague.
2002	The paper "J. Matas et al.: Robust wide baseline stereo from maximally stable extremal regions" was awarded the best paper prize at the British Machine Vision Conference.
1987	MSc. thesis awarded the Chancellor's prize.

Patents

I am a co-inventor on two patent applications (WO/2007/026948 WO/2007/026951).

Grants, Research Projects

Principal investigator of "Algorithms for Face recognition" (2001-2003) funded by the Czech Grant Agency.

Principal investigator of a Czech National Grant "Methods for Visual Recognition of Large Collections of Non-rigid Objects" (till 2011).

I have participated in a number of EU funded projects as a researcher and later as a work package leader, working on following problems: recognition in active vision systems (1991-1995, VAP "Vision as Process" project), face recognition and lip tracking (1995-1997, M2VTS "Multimodal Verification for Teleservices and Security Applications), for face recognition, lip tracking and speaker verification, biometric identity verification (1997-1999, BANCA "Biometric access control for networked and e-commerce applications"), visual recognition (2001-2004, ActIpret "Activity Interpretation") and COSPAL (2004-2007, "COgnitiveSystems using Perception-Action Learning") and DIPLECS (2007-2010, "Dynamic Interac-

tive Perception-action LEarning in Cognitive Systems").
I am the principal investigator of FP7 EU project MASH (2010-2012, "Massive sets of heuristics") and FP7 EU Project Darwin (2011-2015).

Industrial Applications. Consultancies.

Co-founder of a university spin-off company Eyedea Recongition (established in 2006).
I have lead many industry-sponsored projects and consulted for a number of companies.

Hitachi, Japan	2003-2009	Project leader. Face analysis.
Toyota, Japan	2003-2011	Project leader. Object recognition in traffic applications.
Samsung, South Korea	2001-2004	Project leader. Face recognition.
VUL Prague, Czech Republic	2001-2002	Project leader. Feasibility study commissioned by VUL Praha, a manufacturer of unmanned reconnaissance airplanes. Title: Computer vision techniques for processing of video data acquired by sensors on the airplane.
Boeing, USA	1999-2000	Project leader. Development of software for airplane recognition.
Racal, UK	1996	Consultant in a project on the use of colour for license plate recognition.
Zbrojovka Brno, Czechoslovakia	1987-1988	Head developer. Image processing software for a machine vision system.
VUJE Trnava, Czechoslovakia	1988	Project leader. Software development for automatic positioning of a defectoscopic ultrasonic testing device in a nuclear power plant.
TESLA Roznov, Czechoslovakia	1989	Image processing specialist. Development of an image processing system for control of the silicon rafination process. In 1989, TESLA Roznov was the largest manufacturer of integrated circuits in Czechoslovakia.

Other Professional Activities.

I am an Associate Editor-in-Chief of IEEE Transaction on Pattern Analysis and Machine Intellingence. I am on the editorial board of the International Journal of Computer Vision.

I served as an evlautor for the EU FP6 IST call (2003), the EU FP7 IST call (2007), EU Marie-Curie fellowship applications (2007, 2008, 2009). EU FET (Future and Emerging Technologies) projects (2009). In evaluated projects for the Grant Agency of Hong Kong (2008 and 2009) as well as for the Swiss and Swedish grant agencies. Since 2009 I am on the evalution panel for the Czech Grant Agency.

In 2003, I became a representative of the Czech Republic in the standardisation body ISO-IEC JTC 1SC 29WG 11(MPEG). I participated in the proposal of a face descriptor that was included in the MPEG standard.

I have been on the programme committee of a number of major international conferences in the area of computer vision, image retrieval and pattern recognition: International Conference on Computer Vision, Computer Vision and Pattern Recognition, International Conference on Pattern Recognition, Neural Information Processing Systems, European Conference on Computer Vision, International Conference on Face and Gesture Recognition, Audio- and Video-based Biometric Person Authentication, International Conference on Image and Video Retrieval, British Machine Vision Conference, Indian Conference on Computer Vision, Graphics and Image Processing and others. I have served as an area chair for CVPR 2005 and 2006; ECCV 2006, 2008 and 2010; ICCV 2009,.

I was a programme co-chair of the European Conference on Computer Vision in 2004 and the Computer Vision and Pattern Recognition Conference in 2007.

From 2002 to 2004, I was the chairman of Technical Committee 14 "Signal Analysis for Machine Intelligence" of the International Association for Pattern Recognition.

Teaching and PhD student supervision.

Lectures:

2005	Image Processing and Vision, MSc module, University of Surrey, UK
1997-2009	Pattern Recognition, MSc Course, Czech Technical University, Prague Czech R.
2000-2008	Digital Image Processing, MSc Course, Czech Technical University Prague, Czech R.
2002-2009	Advanced Pattern Recognition, PhD Course, Czech Technical University Prague, Czech R.

PhD supervision.
From 1996 till 2003 I co-supervised 4 PhD students at the University of Surrey. All four successfully defended their thesis. At CMP Prague 4 PhD students I supervised graduated. I am currently supervising or co-supervising 5 PhD students.

Publications and Citations
I have published more than 150 papers in refereed journals and conferences. The papers have more than 3300 citations in the Science Citation Index and more than 5800 according to Google Scholar. My h-index is 21 according to WOS and 30 according to Google Scholar.
Most publications are available on-line at `http://cmp.felk.cvut.cz/~matas/`.
Selected publications with impact factors (IF) as of the date of publication:

- J. Cech, J. Matas, M. Perdoch. Efficient Sequential Correspondence Selection by Cosegmentation. IEEE Trans. Pattern Analysis and Machine Intelligence. 32(9): 1568-1581, September 2010, (IF 4.4)
- O. Chum, J. Matas. Large-Scale Discovery of Spatially Related Images. IEEE Trans. Pattern Analalysis and Mach. Intell. 32(2): 371-377, February 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)
- K. Zimmermann, J. Matas, and T. Svoboda. Tracking by an Optimal Sequence of Linear Predictors. IEEE Transactions on Pattern Analysis and Machine Intelligence. 31(4), 2009, (IF 6.0)
- S. Obdrzalek and J. Matas: Object Recognition using Local Affine Frames on Maximally Stable Extremal Regions, invited chapter in Jean Ponce et al., editors: Toward Category-Level Object Recognition, Springer, 2005
- Chum, J. Matas, Optimal Randomized RANSAC, IEEE T PAMI, (30) 8, August 2008, pp. 1472-1482. (IF 3.6)
- J. Matas, O. Chum, U. Martin, and T Pajdla. Robust wide baseline stereo from maximally stable extremal regions. Image and Vision Computing, 22(10):761-767, September 2004. (IF 1.2)
- J. Matas, C. Galambos, and J. Kittler. Robust detection of lines using progressive probabilistic Hough Transform. Computer Vision and Image Understanding, 2000. (IF 0.9)
- J. Matas, K. Jonsson, and J. Kittler. Fast face localisation and verification. Image and Vision Computing , 17(8):578-581, June 1999. (IF 0.4)
- J. Kittler, M. Hatef, R.P.W Duin, and J. Matas. On combining classifiers. IEEE Trans. Pattern Analysis and Machine Intelligence, 20(3):226 - 239, March 1998. (IF 1.4)