

# Michal Uřičář

## Curriculum Vitae

Hlavní 72  
696 61 Vnorovy  
Czech Republic  
☎ +420 776 795 751  
✉ uricar.michal@gmail.com

---

### Personal information

Date of birth **22nd September 1986** Place of birth **Olomouc**, Czech Republic  
Nationality **Czech** Marital status **single**

---

### Education

- 2011–2016 **Ph.D.**, *Czech Technical University in Prague, Artificial Intelligence and Biocybernetics*.  
Focus on: Machine learning methods in computer vision (supervised by Ing. Vojtěch Franc, Ph.D., and temporarily also by prof. Ing. Václav Hlaváč, CSc.). The thesis “Multi-view Facial Landmark Detection” was successfully defended on 27th of March, 2018.
- 2009–2011 **Ing. (equiv. MSc.)**, *Czech Technical University in Prague, Open Informatics*.  
Major field of study— Computer Graphics and Interaction, Minor— Computer Vision and Image Processing. Thesis: Detector of Facial Landmarks (supervised by Ing. Vojtěch Franc, Ph.D.), www: <http://cmp.felk.cvut.cz/~uricamic/flandmark>
- 2006–2009 **Bc. (equiv. BSc.)**, *Czech Technical University in Prague, Software technology and management*.  
Focus: Web & Multimedia. Thesis: Insight Toolkit (supervised by Ing. Petr Felkel, Ph.D.)

---

### Experience

- October 2016–present **SW Design Engineer**, *Valeo Autoklimatizace k.s., Prague*, Computer Vision & Machine Learning Research Team.
- September 2012–216 **Researcher**, *The Center for Machine Perception, CTU in Prague*, Center of Applied Cybernetics, structural recognition.
- July–August 2010, 2011 **Researcher**, *The Center for Machine Perception, CTU in Prague*, Structural recognition.
- Work on the business license
- August–November 2008 **3D graphic artist**, *Visual Connections, a.s., Prague*, Digitalization of the Langweil’s model of Prague.  
Finalization of 3D models, [www.langweil.cz](http://www.langweil.cz)
- 2007–2008 **Graphic artist**, *Locify, ltd., Prague*, Mobile application Locify.  
Design of mobile icons and editing of demonstration videos, [www.locify.com](http://www.locify.com)

---

### Projects

**flandmark**, *Open-source Facial Landmark Detector*.  
www: <http://cmp.felk.cvut.cz/~uricamic/flandmark>,  
github: <https://github.com/uricamic/flandmark>

**CLandmark**, *Open-source Landmarking Library*.  
www: <http://cmp.felk.cvut.cz/~uricamic/clandmark>,  
github: <https://github.com/uricamic/clandmark>

---

## Awards & Grants

- Q1 2017 **Best Employee for the DVS department**, Valeo R&D Prague, Valeo Autoklimatizace k.s., Prague.
- July 2016 **3rd Place**, *ChaLearn Looking at People Challenge: Track 1: Apparent Age Estimation*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Workshops, Las Vegas, Nevada, US.
- October 2014–**NII International Internship Program**, *National Institute of Informatics (NII)*,  
February 2015 Tokyo, Japan, Group of prof. Akihiro Sugimoto.
- May–August **Google Summer of Code**, *Bundle method solver for structured output learning*,  
2012 Shogun Machine Learning Toolbox, <http://www.shogun-toolbox.org/>.
- February **Best Paper Award**, *Detector of facial landmarks learned by the Structured output SVM*, International Conference on Computer Vision Theory and Applications (VISAPP).  
2012
- May 2011 **Dean’s Award for Outstanding Master’s Thesis**, *Detector of facial landmarks*.

---

## Languages

Czech	native speaker	
English	fluent	2006 — First English Certificate (FCE) — Level B2
German	basic knowledge	
Italian	basic knowledge	Learning online on <a href="http://www.duolingo.com">www.duolingo.com</a>
Russian	basic knowledge	Learning online on <a href="http://www.duolingo.com">www.duolingo.com</a>

---

## Computer skills

OS	Windows, Linux, Unix	Web tech.	(X)HTML, CSS, PHP, MySQL
Office packs	Microsoft Office, OpenOffice	DTP and Graphics	T <sub>E</sub> X, L <sup>A</sup> T <sub>E</sub> X, Inkscape, Gimp, Adobe Photoshop
Programming languages	C/C++, MATLAB, Python, GLSL	3D graphics	3ds max, Maya, Inventor
Toolkits	OpenCV, OpenGL, Qt, CMake	IDEs	Microsoft Visual Studio, QtCreator

---

## Training

- Driving license Category B
- Autodesk — basic course
- International Summer School on Pattern Recognition (ISSPR) 2011, Plymouth, UK
- Vision and Sports Summer School (VS3) & NiFTi workshop 2012, Prague, CZ
- International Computer Vision Summer School (ICVSS) 2013, Calabria, IT
- C++11 Thread Library, GOPAS, Prague, CZ
- First English Certificate (FCE)
- Nebeans Certified Associate

---

## Other skills and interests

Photography, Sport (tennis, squash, floorball, basketball), Music (various artists and genres, playing the guitar), Film (various genres), Literature (favorite authors: Tom Clancy, Mario Puzo, J. R. R. Tolkien, Jules Verne, Terry Pratchett)

Prague, January 21, 2019

.....  
Michal Uříčář

---

## Publications

- M. Uříčář, P. Křížek, I. Sobh, D. Hurych, S. Yogamani, and P. Denny, “Yes, we GAN: Applying adversarial techniques for autonomous driving,” in *2019 IST International Symposium on Electronic Imaging, Autonomous Vehicles and Machines 2019, San Francisco, CA, US, January 13–17, 2019*, January 2019.
- M. Uříčář, P. Křížek, D. Hurych, and S. Yogamani, “Towards optimal design of datasets and validation scheme for autonomous driving,” in *The Thirty-second Annual Conference on Neural Information Processing Systems Workshops, CRACK: Critiquing and Correcting Trends in Machine Learning, NIPS/(NeurIPS) Workshops, Montréal, QB, Canada, December 2–8, 2018*, December 2018.
- M. Uříčář, R. Timofte, R. Rothe, J. Matas, and L. Van Gool, “Structured output svm prediction of apparent age, gender and smile from deep features,” in *2016 IEEE Conference on Computer Vision and Pattern Recognition Workshops, CVPR Workshops, Las Vegas, NV, USA, June 26–July 1, 2016*, July 2016.
- M. Uříčář, V. Franc, D. Thomas, S. Akihiro, and V. Hlaváč, “Multi-view facial landmark detector learned by the Structured Output SVM,” *Image and Vision Computing*, vol. 47, pp. 45–59, 2016. 300-W, the First Automatic Facial Landmark Detection in-the-Wild Challenge.
- J. Čech, V. Franc, M. Uříčář, and J. Matas, “Multi-view facial landmark detection by using a 3D shape model,” *Image and Vision Computing*, vol. 47, pp. 60–70, 2016. 300-W, the First Automatic Facial Landmark Detection in-the-Wild Challenge.
- M. Uříčář, V. Franc, and V. Hlaváč, “Facial Landmark Tracking by Tree-based Deformable Part Model Based Detector,” in *Proceedings of IEEE International Conference on Computer Vision, 300 Videos in the Wild (300-VW): Facial Landmark Tracking in-the-Wild Challenge & Workshop, ICCVW’15*, (Santiago, Chile), IEEE, December 2015.
- M. Uříčář, V. Franc, D. Thomas, S. Akihiro, and V. Hlaváč, “Real-time Multi-view Facial Landmark Detector Learned by the Structured Output SVM,” in *BWILD’15: 11th IEEE International Conference on Automatic Face and Gesture Recognition Workshops, Biometrics in the Wild* (B. Bir, H. Abdenour, J. Qiang, N. Mark, and Š. Vitomir, eds.), (New York, US), p. 8, COST Action IC-1106, IEEE Computer Society, May 2015.
- M. Uříčář, V. Franc, and V. Hlaváč, “Bundle methods for structured output learning — back to the roots,” in *SCIA 2013: Proceedings of the 18th Scandinavian Conference on Image Analysis*, Lecture Notes in Computer Science, (Berlin, Germany), Springer-Verlag, June 2013.
- M. Uříčář, V. Franc, and V. Hlaváč, “Facial Landmarks Detector Learned by the Structured Output SVM,” in *Computer Vision, Imaging and Computer Graphics. Theory and Application* (G. Csurka, M. Kraus, R. S. Laramée, P. Richard, and J. Braz, eds.), vol. 359 of *Communications in Computer and Information Science*, pp. 383–398, Heidelberg, Germany: Springer, 2013.
- M. Uříčář, V. Franc, and V. Hlaváč, “Detector of facial landmarks learned by the structured output SVM,” in *VISAPP ’12: Proceedings of the 7th International Con-*

*ference on Computer Vision Theory and Applications*, vol. 1, (Portugal), pp. 547–556, February 2012.

M. Uřičář and V. Franc, “Efficient algorithm for regularized risk minimization,” in *CVWW '12: Proceedings of the 17th Computer Vision Winter Workshop*, (Ljubljana, Slovenia), pp. 57–64, February 2012. CD-ROM.