

Mircea Cimpoi

[Google Scholar](#) | [GitHub](#) | [LinkedIn](#) | [Personal Website](#)

Employment

Postdoctoral Researcher, CIIRC, Czech Technical University, Prague 2017, September –
Research topic: Large scale indoor localization and navigation in indoor environments. Recently investigating navigation in *realistic* indoor spaces (Habitat Environment; Matterport3D).

Machine Learning Engineer, Onfido Background Checks, London 2016, February – 2017, May
Increasing automation rates for identity verification. Data extraction (OCR), image classification for travel documents.

Research Engineer, Magic Pony Technology, London 2015, October – 2016, January

Software Development Engineer, Microsoft Development Center Serbia 2008, August – 2011, July
Designed algorithm for text layout detection; Individual Character Recognition: training model; handling data collection tools. *Shipped product* Bing client app (camera OCR feature). Porting the OCR code from Windows Server to iPhone 4.

Education

Doctor of Philosophy, Department of Engineering, University of Oxford 2011, October – 2015, August
Recognizing describable properties of textures, inspired from human perception. Formulated as an image classification problem; used local descriptors – SIFT, LBP, but also filters from convolutional layers of VGG Net.

Thesis: *Recognizing Describable Attributes and Materials of Textures in the Wild and Clutter* (<https://goo.gl/kP7GQM>)

MSc, Intelligent Systems, Računarski Fakultet, Belgrade, Serbia GPA: 9.00/10

BSc, Computer Science, Babeş Bolyai Univ. Cluj Napoca, Romania GPA: 9.99/10 (3rd/73)

Publications (full list on [Google Scholar](#))

- I. Rocco, **M. Cimpoi**, R. Arandjelović, A. Torii, T. Pajdla, J. Sivic, Neighbourhood Consensus Networks
Spotlight in *Neural Information Processing Systems (NeurIPS)*, 2018 (<https://arxiv.org/abs/1810.10510>).
- H. Taira, M. Okutomi, T. Sattler, **M. Cimpoi**, M. Pollefeys, J. Sivic, T. Pajdla, A. Torii, InLoc: Indoor Visual Localization with Dense Matching and View Synthesis, *Spotlight* in *Computer Vision and Pattern Recognition Conference (CVPR)*, 2018 (<https://arxiv.org/abs/1803.10368>).
- **M. Cimpoi**, S. Maji, I. Kokkinos, A. Vedaldi, Deep filter banks for texture recognition, description, and segmentation, in *Intl. Journal of Computer Vision (IJCV)*, 2016 (<https://goo.gl/dkQ11K>)
- **M. Cimpoi**, S. Maji, A. Vedaldi, Deep Convolutional Filter Banks for Texture Recognition and Segmentation, *Oral (3.3%)* in *Computer Vision and Pattern Recognition Conference (CVPR)*, 2015 (<https://goo.gl/p24tfn>).

Awards, Scholarships

NVIDIA GPU Seed Grant 2018, September
Received a Quadro P6000 (24GB) from NVIDIA to support our research on indoor navigation.

Microsoft Gold Star Award, 2x Microsoft Patent Award 2009, 2010

Microsoft Imagine Cup, Software Design. (team of 4) World Finals (qualified), National Finals (1st) 2008, July

Teaching, Mentorships

Volunteer, Code Club United Kingdom (<https://www.codeclub.org.uk/>) 2016, March – April
Lab demonstrator, B16 Object Oriented Programming 2013 – 2015

Charity and Running

2018 - Prague Half Marathon Time: 1h58'05"

2012 - 2015 - Oxford Town and Gown 10k - Muscular Dystrophy Campaign

(In 2013) Fundraised 2,078 GBP with St. Edmund Hall team. Times: 1h10'06", 1h06'59", 1h04'06", 58'01"

2013 - Reading Mizuno Half Marathon - 400 GBP for Rațiu Family Charitable Foundation