

Mircea Cimpoi

Google Scholar: [3SaQHMQAAAAJ](#) | GitHub: [mcimpoi](#) | LinkedIn: [mirceacimpoi](#)
Website: <https://mircea.science>

Employment

Research Engineer (Computer Vision), Meta (Facebook) Reality Labs, Zurich 2020, January - 2023, July

- Internal tooling for benchmarking CV and ML algorithms, for ad-hoc and periodic evaluations. Launch time reduced from minutes to seconds. Configs under version control.
- Exporting DL models to TorchScript for headset (e.g. Quest 2).
- Privacy and UX compliant design for internal bug report and data collection tool on headset.

Postdoctoral Researcher, Czech Technical University, Prague 2017, September - 2019, November

Large scale localization in *realistic* indoor spaces: InLOC, Matterport3D, Habitat. 1x CVPR, 1x NeurIPS, 2x TPAMI.

Machine Learning Engineer, Onfido Background Checks, London 2016, February - 2017, May

Automating travel document classification (images) and extracting data from these documents (OCR, QR Codes, MRZ). Onboarding new document types for different geographies.

Software Development Engineer, Microsoft Development Center Serbia 2008, August - 2011, July

Shipped feature camera OCR, in Bing iPhone app, by porting OCR code from Windows Server to iPhone 4 GS.

Education

Doctor of Philosophy, Engineering, University of Oxford 2011, October - 2015, August

Texture and material classification, traditional descriptors (SIFT) vs *deep filters* from conv layers: **FMD**: 58% → 82%.

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 (Google Scholar Citations: 3.5K+, h-index: 7, i10-index: 7)

- I. Rocco, M. Cimpoi, R. Arandjelović, A. Torii, T. Pajdla, J. Sivic, *Neighbourhood Consensus Networks - Spotlight in Neural Information Processing Systems (NeurIPS 2018)* and *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI 2020: 10.1109/TPAMI.2020.3016711)*.
- 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)* and *TPAMI 2019: 10.1109/TPAMI.2019.2952114*.
- 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 CVPR 2015* (<https://goo.gl/p24tfN>); 1.1K+ citations.
- M. Cimpoi, S. Maji, I. Kokkinos, S. Mohamed, A. Vedaldi, *Describing textures in the wild*, in *CVPR 2014 (Tensorflow Datasets | 1.6K+ citations | Papers With Code: used in 350+ papers)*.

Conference and Journal Reviewer

ICLR: 2021, NeurIPS: 2019 - 2022, TPAMI: 2018, IJCV 2019

Awards, Scholarships

NVIDIA GPU Seed Grant 2018

Received a Quadro P6000 (24 GB) to support indoor navigation project

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

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