

FILIP RADENović

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Date of birth 09 March 1990 | Nationality Montenegrin

PROFESSIONAL EXPERIENCE

- 2019 Sep – Present:** **Research Scientist**
Facebook AI Applied Research,
Facebook, Menlo Park, USA
- 2018 May – 2018 Aug:** **Research Intern**
Facebook AI Applied Research,
Facebook, Menlo Park, USA
- 2013 Nov – 2019 Aug:** **Researcher**
Center for Machine Perception,
Czech Technical University in Prague, Prague, Czechia
- 2013 Jan – 2013 Oct:** **Research Intern**
Faculty of Electrical Engineering,
University of Montenegro, Podgorica, Montenegro

EDUCATION

- 2013 – Present:** **PhD Computer Vision**
Visual Recognition Group, Center for Machine Perception, Faculty of Electrical
Engineering, Czech Technical University, Prague
- Supervisor: Ondřej Chum
 - Principal area of study: Large scale image retrieval with emphasis on significant scale and viewpoint changes; Representation learning for image retrieval and recognition
- 2011 – 2013:** **MSc Computer Sciences**
Faculty of Electrical Engineering, University of Montenegro, Podgorica
- Thesis: Detection and reconstruction of rigid bodies after micro-Doppler removal in the radar imaging analysis; Supervisor: Vesna Popović-Bugarin
 - Principal areas of study: Digital signal and image processing; Expert systems; Adaptive discrete systems; Databases and Information systems
 - Average grade: 10.00 out of 10, the best student in the class
- 2008 – 2011:** **BSc Electronics, Telecommunications and Computers**
Faculty of Electrical Engineering, University of Montenegro, Podgorica
- Principal areas of study: Programming; Computer engineering; Analogue and Digital electronics; Analogue and Digital telecommunications; Electromagnetics; Mathematics; Physics
 - Average grade: 10.00 out of 10, the best student in the class

SKILLS

- **Computer skills:** Programming in MATLAB, Python, C(++), Android Development (Java)
- **Languages:** Fluent in English and Montenegrin/Serbian (native)

HONORS AND AWARDS

- **Dean's Award for Prestigious Thesis**, Faculty of Electrical Engineering, CTU in Prague (2019)
- **Outstanding Reviewer Honorable Mention**, British Machine Vision Conference (2019)
- **Outstanding Reviewer award**, Conference on Computer Vision and Pattern Recognition (2019)
- **Top 4% (11th/281) / 7% (9th/144)** in the [Google Landmark Recognition / Retrieval](#) (2019)
- **Top 1% (3rd/477) / 3% (6th/209)** in the [Google Landmark Recognition / Retrieval](#) (2018)
- **Best presentation award**, Computer Vision Winter Workshop (CVWW) (2018)
- **Best technical and natural sciences student plaque award**, University of Montenegro (2012)
- **Best science student award**, Montenegrin Academy of Sciences and Arts (2010)
- **Exceptional student capital city award**, Capital City Podgorica (2010)

PROJECTS

- **Large-Scale Image Retrieval Benchmarking: [Revisiting Oxford and Paris](#)** (2018)
 - Toolbox that provides support in downloading and using the new large-scale image retrieval benchmark containing more than million images.
- **CNN Image Retrieval – [MATLAB/MatConvNet](#) and [Python/PyTorch](#)** (2017/2018)
 - Toolbox that implements the training and testing of the convolutional neural networks (CNN) for the task of image retrieval.

INVITED TALKS

- **Large Scale Image Retrieval**, Computer Vision course, FH Hagenberg (2018)
- **Image Retrieval Overview**, Machine Learning Meetups, Prague (2017)
- **Image Retrieval: From basics to recent advances**, Machine Learning Prague Workshop (2017)
- **Image Retrieval 2.0**, Pattern Recognition and Computer Vision Colloquium, Prague (2015)

SELECTED PUBLICATIONS

- Radenović F., Tolias G., Chum O., **Fine-tuning CNN Image Retrieval with No Human Annotation**, TPAMI 2019
- Tolias G., Radenović F., Chum O., **Targeted Mismatch Adversarial Attack: Query With a Flower to Retrieve the Tower**, ICCV 2019
- Radenović F., Tolias G., Chum O., **Deep Shape Matching**, ECCV 2018
- Mishkin D., Radenović F., Matas J., **Repeatability Is Not Enough: Learning Affine Regions via Discriminability**, ECCV 2018
- Radenović F., Iscen A., Tolias G., Avrithis Y., Chum O., **Revisiting Oxford and Paris: Large-Scale Image Retrieval Benchmarking**, CVPR 2018
- Mishchuk A., Mishkin D., Radenović F., Matas J., **Working hard to know your neighbor's margins: Local descriptor learning loss**, NIPS 2017
- Radenović F., Tolias G., Chum O., **CNN Image Retrieval Learns from BoW: Unsupervised Fine-Tuning with Hard Examples**, ECCV 2016 (oral)
- Radenović F., Schönberger J. L., Ji D., Frahm J., Chum O., Matas J., **From Dusk till Dawn: Modeling in the Dark**, CVPR 2016 (spotlight)
- Radenović F., Jégou H., Chum O., **Multiple Measurements and Joint Dimensionality Reduction for Large Scale Image Search with Short Vectors**, ICMR 2015
- Schönberger J. L., Radenović F., Chum O., Frahm J., **From Single Image Query to Detailed 3D Reconstruction**, CVPR 2015
- Reviewer for high-impact journals: **TPAMI, IJCV, CVIU, IEEE-SPL**
- Reviewer for conferences: **CVPR (2020, 2019), ICCV (2019), ECCV (2020), BMVC (2019), ICPR (2018)**