

FILIP RADENOVIĆ

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Date of birth 09 March 1990 | **Nationality** Montenegrin | **Webpage** cmp.felk.cvut.cz/~radenfil

PROFESSIONAL EXPERIENCE

- 2018:** **Research Intern**
Facebook, Menlo Park, USA
- Research work in computer vision
- 2013 – Present:** **Researcher**
Center for Machine Perception, Czech Technical University in Prague
- Research work in computer vision, mainly large scale image retrieval; teaching assistance
- 2013:** **Software Engineer**
Ericsson Nikola Tesla, Zagreb, Croatia
- Summer workshop for senior students. Working on a Telecommunications data modeling project
- 2012 – 2013:** **Research Intern**
Faculty of Electrical Engineering, University of Montenegro, Podgorica
- Research work in digital signal processing and teaching assistance for the Programming II course

EDUCATION

- 2013 – Present:** **PhD Computer Vision**
Center for Machine Perception (CMP), Department of Cybernetics, 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

- Top 1% (3rd) / 3% (6th) in the [Google Landmark Recognition/Retrieval Challenge](#) (2018)
- Best technical and natural sciences student plaque award, University of Montenegro (2012)
- Exceptional technical student award, Engineers' Chamber of Montenegro (2012)
- Top 5 electrical engineering students award, Electrical Power Company of Montenegro (2012)
- Best science student award, Montenegrin Academy of Sciences and Arts (2010)
- Exceptional student capital city award, Capital City Podgorica (2010)
- Exceptional student faculty award, FEE., University of MNE (2009, 2010, 2011)

PROJECTS

- 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.
- Android, iOS and web applications – [Budi Odgovoran \(Be Responsible\)](#) (2013)
 - Every citizen can use applications to submit information about irregularities like garbage, holes on roads, broken traffic lights or signs etc. Information will automatically reach institution in charge.
- Android application – [ETF Podgorica \(Faculty of Electrical Engineering\)](#) (2013)
 - This application is made for students of Electrical Engineering Faculty so that they can easily access schedules, courses synopsis, news, results and materials.
- Android application – [Wake Up Alarm](#) (2012)
 - An intuitively designed alarm dock application consisting of interesting mini-games to help you overcome the struggle of waking up in the morning.

PUBLICATIONS

- Radenović F., Tolias G., Chum O.
Fine-tuning CNN Image Retrieval with No Human Annotation, TPAMI 2018
- Radenović F., Iscen A., Tolias G., Avrithis Y., Chum O.
Revisiting Oxford and Paris: Large-Scale Image Retrieval Benchmarking, CVPR 2018
- Radenović F., Tolias G., Chum O.
Generic Sketch-Based Retrieval Learned without Drawing a Single Sketch, arXiv 2017
- 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)
- Sattler T., Havlena M., Radenović F., Schindler K., Pollefeys M.
Hyperpoints and Fine Vocabularies for Large-Scale Location Recognition, ICCV 2015
- 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
- Mikulík A., Radenović F., Chum O., Matas J.
Efficient Image Detail Mining, ACCV 2014
- Reviewer for high-impact journals: TPAMI, IJCV, CVIU