

Denys Rozumnyi

Curriculum Vitae

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Education

- Oct 2018 – **Technical University of Munich**, *Erasmus+ Student Exchange Programme*, Master of Science in Computer Science.
- Mar 2019
- Jul 2017 – **Czech Technical University in Prague**, *Master of Science*, Specialisation: Computer Vision and Image Processing, Minor Specialisation: Artificial Intelligence.
- Present
- Sep 2014 – **Czech Technical University in Prague**, *Bachelor of Science (with honours)*, Specialisation: Computer Science, Minor Specialisation: Mathematics, GPA: 3.92 from 4.00.
- Jun 2017
- Sep 2016 – **Swansea University, Wales, UK**, *Erasmus+ Student Exchange Programme*, *Computer Science*.
- Jan 2017
- Aug 2015 **Vision and Sports Summer School**, in Prague, Czech Republic.

Work Experience

- Jul 2018 – **Student Summer Research Fellowship**, *ETH Zurich*, Zurich, Switzerland.
- Aug 2018 Topic: Semantic 3D reconstruction. Supervisors: prof. Marc Pollefeys, Dr. Martin Oswald.
- Mar 2018 – **Research Fellow**, *Center for Machine Perception*, CTU in Prague, Czech Republic.
- Present Topic: Tracking at all speeds. Supervisor: prof. Jiří Matas.
- Aug, Sep 2017 **Summer Internship**, *Tampere University of Technology*, Tampere, Finland.
- Creating demo for fast moving objects detection: <https://github.com/rozumden/fmo-cpp-demo>.
- Supervisors: prof. Jiří Matas, prof. Joni Kämäräinen.
- Sep 2016 – **Research Intern**, *Center for Machine Perception*, CTU in Prague, Czech Republic.
- Feb 2018 Topic: Detection and tracking of fast moving objects [2]. Supervisor: prof. Jiří Matas.
- Jul 2016 – **Summer Internship**, *Tampere University of Technology*, Tampere, Finland.
- Aug 2016 Topic: Detection and tracking of fast moving objects [2]. Supervisor: prof. Jiří Matas.
- Sep 2014 – **Research Intern**, *Center for Machine Perception*, CTU in Prague, Czech Republic.
- Jun 2016 Topic: Coplanar repeated patterns detection in images [1]. Supervisor: James Pritts, Ondřej Chum.

Awards

- Jan 2018 **Valeo scholarship** - two-year scholarship for exceptional master students at CTU sponsored by Valeo (multinational company for automotive driving).
- Jan 2018 **Upsilon Pi Epsilon** - lifetime membership in honour society Upsilon Pi Epsilon: International Honor Society for the Computing and Information Disciplines.
- Nov 2017 **Josef Hlávka's Award** (Cena Josefa Hlávky) – a highly prestigious award for best students and graduates in the Czech Republic. Awarded by The Foundation of Josef, Marie and Zdeňka Hlávka, the oldest Czech foundation established in 1904.
- Aug 2017 **Dean's Award** for an exceptional bachelor thesis, Faculty of Electrical Engineering, Czech Technical University in Prague.
- Aug 2017 Bachelor degree with distinctions.
- 2014-2018 Stipends for excellent study results.

Demos and talks

- 07.07.2018 EECVC'18 – Invited speaker at Eastern European Conference on Computer Vision, Odessa, Ukraine.
- Sep 2017 Tampere University of Technology (TUT), Tampere, Finland. Demo showing and explaining fast moving objects detection for campus visitors, during exhibitions or lectures. Sponsored by TUT.
- 23.07.2017 IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2017, Honolulu, Hawaii. Presented demo on fast moving objects.
- 14.06.2017 OI Intro – introduction of Open Informatics programme in CTU for interested students. Presentation and demo on topic of fast moving objects.
- 26.04.2017 Enable-S3: WP3.1 Machine Learning Workshop in Prague – talk about fast moving objects at a small conference for professionals in the field of autonomous driving.

Bachelor Thesis

- Title *Tracking, Learning and Detection over a Large Range of Speeds*
- Supervisor prof. Jiří Matas
- Description This thesis is based on combining standard "slow-motion" tracker and the FMO tracker [3].

Programming Skills

- Advanced MATLAB, PYTHON, C++, JAVA
- Intermediate BASH, LATEX, MYSQL
- Basic PROLOG, LISP, HASKELL

Languages

- Fluent **English, Czech**
- Native **Ukrainian, Russian**
- Basic **French, German**

Publications

- [3] D. Rozumnyi. *Tracking, Learning and Detection over a Large Range of Speeds*. Bachelor thesis, Czech Technical University in Prague. URL: <https://dspace.cvut.cz/handle/10467/70179>.
- [2] D. Rozumnyi, J. Kotera, F. Šroubek, L. Novotný, J. Matas. *The World of Fast Moving Objects*. In IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2017, Honolulu, Hawaii. URL: http://openaccess.thecvf.com/content_cvpr_2017/html/Rozumnyi_The_World_of_CVPR_2017_paper.html, Website: <http://cmp.felk.cvut.cz/fmo>
- [1] J. Pritts, D. Rozumnyi, M. P. Kumar, O. Chum. *Coplanar Repeats by Energy Minimization*. In 27th British Machine Vision Conference (BMVC) 2016, York, England. URL: <http://www.bmva.org/bmvc/2016/papers/paper107/index.html>