

# Nikolaos-Antonios Ypsilantis

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## CONTACT INFORMATION

**e-mail:** [ypsilnik@fel.cvut.cz](mailto:ypsilnik@fel.cvut.cz)

**Address:** Karlovo namesti 13, 121 35 Praha 2, Czech Republic,  
Office G3 (building G, room 3).

**LinkedIn:** [\[link\]](#) , **GitHub:** [\[link\]](#) , **Google Scholar:** [\[link\]](#) ,

**Personal Website:** [\[link\]](#)

## RESEARCH INTERESTS

Large Scale Visual Recognition, Image Representation Learning, Computer Vision,  
Deep Learning

## EDUCATION

**Czech Technical University in Prague (CTU)** *May. 2022 – present*  
**Ph.D. Student** at the Visual Recognition Group (VRG), Department of Cybernetics,  
Faculty of Electrical Engineering

- Topic: **Efficient global representations for universal visual recognition**
- Supervisor: Prof. Ondrej Chum

**National Technical University of Athens** *Oct. 2016 – Feb. 2022*  
Diploma (5 year joint Master's degree, 300 ECTS) in **Electrical & Computer Engineering (ECE)**

- *Average Grade:* 8.53/10
- *Major:* Computer Science
- *Specialization:* Deep Learning, Computer Vision, Natural Language Processing

## PROFESSIONAL EXPERIENCE

**Czech Technical University in Prague (CTU)** *Feb. 2021 - Apr. 2022*  
**Research intern** at the Visual Recognition Group (VRG), Department of Cybernetics,  
Faculty of Electrical Engineering, under the supervision of Assist. Prof. Giorgos Tolias

- Focused on Instance-level Recognition (ILR) task using Deep CNNs
- Involved in the development of a large scale dataset and benchmark for ILR on artworks
- Research on Representation Learning using Deep Metric Learning and Self - Supervised Learning

## SCHOOL - WORKSHOPS - CONFERENCES (ATTENDED)

**27th Computer Vision Winter Workshop (CVWW)** [\[link\]](#) *Feb. 2024*  
Annual meeting of several computer vision research groups located in Graz, Ljubljana,  
Prague, and Vienna. Took place in Terme Olimia, Slovenia.

**International Conference on Computer Vision (ICCV)** [\[link\]](#) *Oct. 2023*  
Premier international computer vision event comprising the main conference and several co-located workshops and tutorials. Took place in Paris, France.

**Vision and Sports Summer School** [\[link\]](#) *July 2022*  
Attended Vision and Sports summer school in Prague, Czech Republic.

## REVIEWING EXPERIENCE

**Served as reviewer for the following conferences-journals.**

- *International Journal of Computer Vision (IJCV)*
- *Computer Vision and Pattern Recognition Conference (CVPR)*

## TEACHING EXPERIENCE

**Programming Essentials (CTU)** [\[link\]](#) *Sept. 2022 - Feb. 2022*  
Lab teacher of introduction to programming with Python, also responsible for home-

	work grading. Course is compulsory in the Bachelor's EECS program and is taught in English.	
PUBLICATIONS	<p>Nikolaos-Antonios Ypsilantis, Kaifeng Chen, Bingyi Cao, Mário Lipovský, Pelin Dogan-Schönberger, Grzegorz Makosa, Boris Bluntschli, Mojtaba Seyedhosseini, Ondřej Chum, André Araujo : “Towards Universal Image Embeddings: A Large-Scale Dataset and Challenge for Generic Image Representations” <a href="#">[link]</a></p> <p>Proceedings of <b>International Conference on Computer Vision (ICCV) 2023</b></p> <p>Nikolaos-Antonios Ypsilantis, Noa Garcia, Guangxing Han, Sarah Ibrahimi, Nanne Van Noord, Giorgos Tolias : “The Met Dataset: Instance-level Recognition for Artwork” <a href="#">[link]</a></p> <p>Proceedings of <b>NeurIPS 2021, Track on Datasets and Benchmarks</b></p>	
INVITED TALKS	<p><b>Computer Vision Winter Workshop (CVWW) 2024</b> <span style="float: right;"><i>Feb. 2024</i></span></p> <p>Presented work on improving large-scale sketch classification with co-segmentation.</p> <p><b>4th Instance-Level Recognition Workshop (ICCV 2021)</b> <span style="float: right;"><i>Oct. 2021</i></span></p> <p>Presented the Met dataset <a href="#">[link]</a></p>	
TECHNICAL SKILLS	<p><b>Programming Languages</b> <span style="float: right;">Python, C/C++</span></p> <p><b>Machine/Deep Learning Frameworks</b> <span style="float: right;">PyTorch, Jax/Flax, scikit-learn</span></p> <p><b>Data Analysis and Visualization</b> <span style="float: right;">NumPy, SciPy, matplotlib, pandas</span></p> <p><b>Scientific Programming</b> <span style="float: right;">MATLAB, GNU Octave</span></p> <p><b>Computer Vision Frameworks</b> <span style="float: right;">OpenCV, scikit-image</span></p> <p><b>Databases</b> <span style="float: right;">MySQL</span></p> <p><b>Version Control</b> <span style="float: right;">Git</span></p> <p><b>Typesetting</b> <span style="float: right;">LaTeX</span></p> <p><b>Operating Systems</b> <span style="float: right;">Linux, Windows</span></p>	
PROJECTS	<p><b>Optional summer project for the DSP course at ECE NTUA</b> <span style="float: right;"><i>2019</i></span></p> <p>Worked on analysing and implementing the algorithm described in: <i>M. Aharon, M. Elad and A. Bruckstein, "K-SVD: An algorithm for designing overcomplete dictionaries for sparse representation"</i>.</p>	
SEMINARS ATTENDED	<p><b>International Particle Physics Outreach Group</b> <span style="float: right;"><i>Mar. 2016</i></span></p> <p>Masterclass on particle physics for highschool students</p>	
LANGUAGES	<p><b>Greek(Native)</b></p> <p><b>English(Fluent)</b></p> <ul style="list-style-type: none"> <li>– <i>University of Cambridge</i> <span style="float: right;"><i>Dec. 2013</i></span></li> <li>Certificate of Proficiency in English</li> <li>C2 Proficiency</li> <li>– <i>University of Michigan</i> <span style="float: right;"><i>Nov. 2013</i></span></li> <li>Certificate of Proficiency in English</li> <li>C2 level</li> </ul> <p><b>German(Basic)</b></p> <ul style="list-style-type: none"> <li>– <i>Goethe Insitut</i> <span style="float: right;"><i>Mar. 2015</i></span></li> <li>Goethe-Zertifikat B1</li> </ul>	
HOBBIES	Travelling, Table Tennis, Nature Exploration	

## REFERENCES

Ondrej Chum [\[link\]](#), Giorgos Tolias [\[link\]](#)