

Nikolaos-Antonios Ypsilantis

CONTACT INFORMATION

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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 image 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

RESEARCH EXPERIENCE

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

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

TEACHING EXPERIENCE

Programming Essentials (CTU [\[link\]](#)) *Sept. 2022 - present*
Lab teacher of introduction to programming with Python, also responsible for homework grading. Course is compulsory in the Bachelor's EECS program and is taught in English.

PUBLICATIONS	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” [link] Proceedings of International Conference on Computer Vision (ICCV) 2023	
	Nikolaos-Antonios Ypsilantis, Noa Garcia, Guangxing Han, Sarah Ibrahimi, Nanne Van Noord, Giorgos Tolias : “The Met Dataset: Instance-level Recognition for Artwork” [link] Proceedings of NeurIPS 2021, Track on Datasets and Benchmarks	
INVITED TALKS	Computer Vision Winter Workshop (CVWW) 2024 Presented work on improving large-scale sketch classification with co-segmentation.	<i>Feb. 2024</i>
	4th Instance-Level Recognition Workshop (ICCV 2021) Presented the Met dataset [link]	<i>Oct. 2021</i>
TECHNICAL SKILLS	Programming Languages Machine/Deep Learning Frameworks Data Analysis and Visualization Scientific Programming Computer Vision Frameworks Databases Version Control Typesetting Operating Systems	Python, C/C++ PyTorch, Jax/Flax, scikit-learn NumPy, SciPy, matplotlib, pandas MATLAB, GNU Octave OpenCV, scikit-image MySQL Git LaTeX Linux, Windows
PROJECTS	Optional summer project for the DSP course at ECE NTUA 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> .	<i>2019</i>
SEMINARS ATTENDED	International Particle Physics Outreach Group Masterclass on particle physics for highschool students	<i>Mar. 2016</i>
LANGUAGES	Greek (Native) English (Fluent) <ul style="list-style-type: none">– <i>University of Cambridge</i> Certificate of Proficiency in English C2 Proficiency– <i>University of Michigan</i> Certificate of Proficiency in English C2 level German (Basic)	 <

HOBBIES Travelling, Table Tennis, Nature Exploration

REFERENCES Ondrej Chum [\[link\]](#), Giorgos Tolas [\[link\]](#)