# 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 Retrieval, Fine-grained Recognition

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: **Scalable 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)**          *May. 2022 – present*
**Researcher** at the Visual Recognition Group (VRG), Department of Cybernetics,
Faculty of Electrical Engineering.
  – Research focus on developing scalable image representations for fine-grained and
    instance-level retrieval across multiple domains.
  – Collaborated with an industrial researcher (Google Research) to develop an academic benchmark for the evaluation of Universal Image Embeddings, leading to
    a publication at the International Conference on Computer Vision (ICCV) 2023.

**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 CNNs and Deep Metric
    learning.
  – Involved in the development of a large scale dataset and benchmark for ILR on
    artworks, collaborating with a team of international researchers.

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**.

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|---|---|
| ACADEMIC SERVICE | **Served as reviewer for the following conferences-journals.**<br>– *International Journal of Computer Vision (IJCV)*<br>– *Computer Vision and Pattern Recognition Conference (CVPR)*<br>– *European Conference on Computer Vision (ECCV)* |

**TEACHING EXPERIENCE**

**Programming Essentials (CTU [link])** *Sept. 2022 - Feb. 2022*
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.

**INVITED TALKS**

**Computer Vision Winter Workshop (CVWW) 2024** *Feb. 2024*
Presented work on improving large-scale sketch classification
with co-segmentation.

**4th Instance-Level Recognition Workshop (ICCV 2021)** *Oct. 2021*
Presented the Met dataset [link]

**TECHNICAL SKILLS**

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| **Programming Languages** | Python, C/C++ |
| **Machine/Deep Learning Frameworks** | PyTorch, Jax/Flax, scikit-learn |
| **Data Analysis and Visualization** | NumPy, SciPy, matplotlib, pandas |
| **Scientific Programming** | MATLAB, GNU Octave |
| **Computer Vision Frameworks** | OpenCV, scikit-image |
| **Version Control** | Git |
| **Typesetting** | LaTeX |
| **Operating Systems** | Linux, Windows |

**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.

**LANGUAGES**

**Greek**(Native)

**English**(Fluent)
– *University of Cambridge* *Dec. 2013*
  Certificate of Proficiency in English
  C2 Proficiency
– *University of Michigan* *Nov. 2013*
  Certificate of Proficiency in English
  C2 level

**German**(Basic)
– *Goethe Insitut* *Mar. 2015*
  Goethe-Zertifikat B1

**HOBBIES**

Travelling, Table Tennis

**REFERENCES**

Ondrej Chum [link], Giorgos Tolias [link]