

NIKOLAOS IOANNIS BOUNTOS

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GitHub: <https://github.com/ngbountos>

EDUCATION

Technical University of Munich

February 2020

MSc: Data Engineering and Analytics

Thesis: Sub-pixel classification of anthropogenic features using deep learning on the Copernicus Sentinel-2 data

Aristotle University of Thessaloniki

September 2016

BSc: Computer Science

Thesis: Study of Causal Inference Algorithms

Publications:

- Bountos, Nikolaos Ioannis, et al. "Self-supervised contrastive learning for volcanic unrest detection." *IEEE Geoscience and Remote Sensing Letters* 19 (2021): 1-5.
<https://ieeexplore.ieee.org/abstract/document/9517282>
- Bountos, Nikolaos Ioannis, Dimitrios Michail, and Ioannis Papoutsis. "Learning from Synthetic InSAR with Vision Transformers: The case of volcanic unrest detection." *IEEE Transactions on Geoscience and Remote Sensing* (2022).
<https://ieeexplore.ieee.org/document/9791383>
- Bountos, Nikolaos Ioannis, et al. "Hephaestus: A large scale multitask dataset towards InSAR understanding." *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*. 2022.
<https://arxiv.org/abs/2204.09435>
- Papoutsis, Ioannis, et al "Benchmarking and scaling of deep learning models for land cover image classification." (Under review *ISPRS Journal of Photogrammetry and Remote Sensing*),
<https://arxiv.org/pdf/2111.09451.pdf>

Conferences:

- PIA19 - Photogrammetric Image Analysis 2019
Sentinel-2 sub-pixel classification enhancement using General Adversarial Network and UAV data
- EGU2020 - European Geosciences Union general assembly 2020
Sub-pixel classification of anthropogenic features using deep learning Sentinel-2 data
- Cities on Volcanoes 11
Towards a global volcanic activity alerting system based on Interferometric Synthetic Aperture Radar

WORK EXPERIENCE

| Position | Institute/Company | Time Period |
|------------------------------------|--------------------------------|--------------------------------|
| Beyond Fellow, Visiting Researcher | AI4EO Future Lab, TU Munich | September 2022 - December 2022 |
| AI Researcher/PhD student | National Observatory of Athens | January 2021 - Present |
| Artificial Intelligence Engineer | Motius | December 2019 - April 2020 |
| Master Thesis on Computer Vision | Esri Deutschland | April 2019 - September 2019 |
| Working Student Data Analytics | KPIT | July 2018 - February 2019 |
| Working Student Data Scientist | Trillr.com | October 2017 - January 2018 |
| Web Developer | Newte | December 2016 - April 2017 |