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:

- Self-Supervised Contrastive Learning for Volcanic Unrest Detection, IEEE Geoscience and Remote Sensing Letters, 2021,
  https://ieeexplore.ieee.org/abstract/document/9517282

- Learning class prototypes from Synthetic InSAR with Vision Transformers. (Under review IEEE Transactions on Geoscience and Remote Sensing)
  https://arxiv.org/pdf/2201.03016.pdf

- Efficient deep learning models for land cover image classification. (Under review ISPRS Journal of Photogrammetry and Remote Sensing),
  https://arxiv.org/pdf/2111.09451.pdf

- Hephaestus: A large scale multitask dataset towards InSAR understanding, CVPR2022 workshop EARTHVISION,
  https://arxiv.org/abs/2204.09435

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

Coursera Certificates:

- Machine Learning
- Neural Networks and Deep Learning
- Functional Programming Principles in Scala
- Introduction to Philosophy

WORK EXPERIENCE

AI Researcher/PhD student at **National Observatory of Athens**   January 2021 - Present
> *Research on computer vision for remote sensing.*

Artificial Intelligence Engineer at **Motius**   December 2019 - April 2020
> *Joint project with MTU Aero Engines AG on fault detection of turbines using 3D scans. Responsible for creating a deep learning pipeline for both 3D and 2D classification.*

Master Thesis on Computer Vision at **Esri Deutschland**.   April 2019 - September 2019
> *Investigated sub-pixel classification on Sentinel-2 data.*

Working Student Data Analytics at **KPIT**   July 2018 - February 2019
> *Responsible for log analysis and monitoring using ELK stack.*

Working Student Data Scientist at **Trillr.com**   October 2017 - January 2018
> *Responsible for the creation, design and maintenance of the company's database. Additionally, responsible for business intelligence, data analysis, visualization and process automation tasks.*

Web Developer at **Newte**   December 2016 - April 2017
> *Responsible for the creation of websites and the extension of the functionality of existing ones.*

OTHER ACTIVITIES

- XPLORE pre-incubation programme *EkfrasisAI : Aesthetic based recommendation system*