

# ANASTASIOS KATSOS

## Personal Info

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Last Name : Katsos  
First Name : Anastasios  
Date of Birth : 04/08/1996  
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GitHub : github.com/akatsos

## Education

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- **Harokopio University of Athens (HUA) – School of Digital Technology:**
  - **BSc in “Informatics and Telematics” (2020)**
  - BSc Thesis title: *“SYSTEM CREATION FOR AUTOMATED RECEPTION AND PROCESS OF AUTOMATIC PICTURE TRANSMISSION SIGNALS FROM NOAA POES SATELLITES AND DATABASE STORING FOR WEB-BASED VIEW”*
- Internship at **“National Observatory of Athens”, “Institute for Astronomy, Astrophysics, Space Applications, and Remote Sensing” (IAASARS/NOA)- BEYOND CENTRE OF EXCELLENCE in “REMOTE SENSING & BIG DATA”**
- **National Technical University of Athens (NTUA) – School of Rural and Surveying Engineering:**
  - **MSc in “Geoinformatics” (2020 – In Progress)**

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- Specialization in:
    - **Python/Java, Shell Scripting, Django, Java Spring, NodeJS**
    - Python libraries and **Data Structures for Big Data** (eg pandas, xarray, HDF, NetCDF, GRIB)
    - **Relational Databases** (*Oracle Database, PostgreSQL, Solr, InfluxDB*)
    - **Web Application Design & Development**
    - **Linux Server Management & Monitoring** (Debian, TIG Stack)
    - **Web Server Management & Monitoring** (*Apache, Nginx, HAProxy*)
    - **Catalogue Services – Web (CSW)** (eg Geoserver)

## Work Experience

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### **“National Observatory of Athens”, “Institute for Astronomy, Astrophysics, Space Applications, and Remote Sensing” (IAASARS/NOA) - BEYOND CENTRE OF EXCELLENCE (2019 - Today)**

- Design, development and monitoring of an automated system for the reception, processing and provision of data from eight polar-orbiting earth-observation satellites (EOS/Terra, EOS/Aqua, SUOMI NPP, NOAA-20, FengYun-3B, NOAA-19, Metop-A, Metop-B). The aforementioned data, are being received from the premises of NOA in Penteli via its X/L band antenna. After the reception, the data are being processed to create L1 and L2 level products which are then catalogued, stored in a long-term archive and become available to the public. Users can then search through the catalogued products based on the satellite, satellite sensor, time of acquisition, product type etc. and download the requested products either through the website or the provided REST API. This system, is an additional resource of the Hellenic Mirror Site national infrastructure while its products are being added to the European Portal of Data of the NextGEOSS programme daily.  
(<https://groundsegment.space.noa.gr/>)
- Development of Harvesters for the NextGEOSS programme which proposes to develop the next generation European data hub and cloud platform for Earth Observation data. Many harvesters were created for REST APIs, Opensearch, CSW etc.  
(<https://catalogue.nextgeoss.eu/>)  
(<https://github.com/NextGeoss/ckanext-nextgeossharvest>)
- Team member of the research project «Sentinels Rolling Archive Products User Access, Operations, Maintenance and Evolutions». More specifically, the aim of the project is the maintenance of the Hellenic Mirror Site, the Copernicus Sentinels Hubs and the operation of a large infrastructure of virtual machines (more than 80) and storage exceeding 1PB, which serves the uninterrupted distribution of satellite data to a global community of users.
- Contribution to the programme «Earth Observation for Sustainable Development» (EO4SD) of the European Space Agency in the branch of Climate Resilience. The aim of the program is to educate users nationally and internationally on issues related to Earth Observation. My role in this project was to create courses regarding the use of the built-in "Jupyter Notebooks" of the programme platform (eg use of the built-in API, processing satellite and in situ data, creating graphs using said data). Through these courses, even the most novice users will be able to programmatically use the data provided by the platform for their research.  
(<http://eo4sd-climate.gmv.com/content/material#14>)

(<http://eo4sd-climate.gmv.com/content/webinar-series-1-module-7>)

- Participation in the programme "CLIMPACT" of the General Secretariat for Research and Technology of the Ministry of Development and Investment. The aim of this programme is the study of climate change and its effects on Greece. My role in this action is to provide satellite data from polar orbiting satellites (EOS / Terra, EOS / Aqua, SUOMI NPP, NOAA-20, FengYun-3B, NOAA-19, Metop-A, Metop-B, Sentinel-1/2/3/5) regarding the country of Greece.

## Foreign Languages

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- Greek – Native Language
- English - Certificate of Proficiency in English (ECPE) (University of Michigan)
- French - Diplôme d'études en langue française (DELFF) A2

## Hobbies

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- Amateur Astronomy
- Astrophotography (Deep Space and Planetary) (<http://stellarsymmetry.blogspot.com>)
- Music (drums)