



George Stavrakakis

Nationality: Greek **Date of birth:** 19/01/2002 **Place of birth:** Greece **Gender:** Male **Phone:** ☎ (+30) 6988594443 (Mobile) ✉ **Email address:** george.stavrakakis1@gmail.com  **LinkedIn:** [George Stavrakakis](#)

ABOUT ME

I hold a Bachelor's degree in Physics from the University of Crete and a Joint Master's degree in Artificial Intelligence and Visual Computing from the University of West Attica and Université de Limoges. I currently work as a Research Assistant, applying machine learning, programming and data analysis to research projects.

I am passionate about physics, mathematics and computer science and enjoy combining these fields to approach complex problems. I am particularly interested in environmental applications and in contributing to innovative solutions that support sustainability. Curious and motivated, I am always eager to develop my knowledge, explore new ideas and strengthen my technical and research skills.

WORK EXPERIENCE

RSLab - Greece, Heraklion

Research Assistant

[01/12/2025 - Current]

- Contribute to research projects in machine learning, image analysis and geospatial data processing.
- Support the development, implementation and evaluation of data-analysis algorithms.
- Process, organise and analyse research datasets using programming and specialised software tools.
- Assist with the preparation of technical reports, research results, presentations and documentation.
- Collaborate with researchers and technical staff on the development and testing of research methods and applications.

EDUCATION & TRAINING

Joint Master's Degree in Artificial Intelligence and Visual Computing

University of West Attica and Université de Limoges [01/09/2024 - 01/07/2026]

City: Athens | **Country:** Greece

Level in EQF: 7

Artificial intelligence, machine learning, deep learning, computer vision, image processing and analysis, data analysis, geoinformatics, scientific programming, algorithm development and research methodology.

Degree in Physics

University of Crete [01/09/2019 - 01/09/2024]

City: Heraklion | **Country:** Greece

Level in EQF: 6

Core areas of physics, mathematical modelling, laboratory methods, data analysis, scientific computing, problem-solving and research methodology.

LANGUAGE SKILLS

Mother tongue(s): Greek

English

LISTENING: B2 **READING:** B2 **WRITING:** B2

SPOKEN PRODUCTION: B2

SPOKEN INTERACTION: B2

SKILLS

Motivated | Responsibility | Teamwork | think analytically

Programming Languages and Tools

Python | C | Matlab | Microsoft Excel | Jupyter Notebook | OriginLab | Blender

CONFERENCES & SEMINARS

[15/07/2024 - 19/07/2024] ESEC-Galaxia, Transinne, Belgium

EARTH OBSERVATION REMOTE SENSING WORKSHOP 2024 ESA Academy I attended a 5-day workshop on Earth Observation and Remote Sensing, organized by ESA. The workshop covered an introduction to ESA's programmes and remote sensing fundamentals, including ESA Earth observation missions and image analysis techniques. It detailed the Earth observation processing workflow, bio-geophysical parameter retrieval for ocean and land applications, and optical remote sensing. Advanced topics included thermal infrared remote sensing, Synthetic Aperture Radar (SAR), Interferometric SAR (InSAR), and radar remote sensing techniques. Additionally, it focused on multi-sensor SAR time-series processing for land applications, cloud-based Earth observation data analytics, and GIS applications. The workshop concluded with techniques for fusing radar and optical remote sensing data and an evaluation of the learned concepts.

Links: <https://europa.eu/europass/eportfolio/screen/share/509a106c-c08d-4df9-aa3d-4118139d2e38?lang=el> | <https://europa.eu/europass/eportfolio/screen/share/0312f48a-ed04-4459-abab-7d1e2ff371df?lang=el>

PROJECTS

[01/12/2025 - 01/07/2026]

Machine Learning-Based Classification of Airborne Hyperspectral Imagery over Limassol Using Independent In-Situ Hyperspectral Measurements for Model Training Research internship focused on machine learning, image classification and data analysis. Main responsibilities included processing research data, developing and evaluating classification methods, analysing results and preparing technical documentation.

[10/02/2023 - 10/07/2023]

Classification of multi-spectral data using terrestrial field measurements and machine learning Name of unit or department: RsLab (<https://rslab.gr/index.html>)

Supervisor: Giannis Lantzanakis

Collaborating with my colleague and our supervisor, we conducted a comprehensive project focused on the classification of multi-spectral data using ground measurements and machine learning techniques and a WorldView-3 image. Working with this 2 by 2 m image of the entire Heraklion region from the WorldView-3 satellite, we employed an RS-3500 radiometer to capture sample images of diverse materials up close across various locations, correlating image pixels with GPS coordinates. Following atmospheric correction, we compiled spectra for each material category from the satellite image, leveraging SVM algorithms for classification. Our efforts yielded promising results initially, achieving an 85% accuracy rate. However, further experimentation revealed varying accuracies upon switching individual material classes with classes made from up close collection, prompting the need for additional data collection to enhance classification performance. Throughout the project, our collaboration underscored the significance of adequate spectral channels and the importance of careful data collection for accurate classification outcomes.

Links: <https://europa.eu/europass/eportfolio/screen/share/797a5194-1747-4fca-802d-865fd4a1c0b1?lang=el> | <https://europa.eu/europass/eportfolio/screen/share/7e0ea014-161a-49ea-b19f-0ac226ca5aec?lang=el>

[29/09/2022 - 02/2023]

Effect of Alcohol on Students' Future and Current School Performance using machine learning In this project, I collaborated with colleagues to investigate the influence of alcohol consumption on students' academic performance using machine learning techniques.

Link: <https://europa.eu/europass/eportfolio/screen/share/aacafa31-8a9e-4c60-816f-4f988157d22b?lang=el>

HOBBIES AND INTERESTS

Basketball | Football | Ping Pong | Tedx events | Puzzles | Video Games

INTERNSHIP

[29/06/2023 - 09/10/2023]

Lidar data analysis and bathymetry

Organization: TerraSolutions

Internship supervisor: Dimitris Poursanidis

Email: dpoursanidis@iacm.forth.gr

During my internship, I focused on exploring bathymetry techniques, drawing from a study that integrated ICESat-2 lidar data with Sentinel-2 optical imagery. My main task involved utilizing the Google Earth Engine cloud platform to merge and analyze these datasets for creating high-resolution bathymetric maps in coastal regions like Florida, Crete, and Bermuda. While my primary objective was to reproduce the results of the referenced study, my efforts primarily involved experimentation and testing rather than generating conclusive findings. I engaged in model calibration and validation using ICESat-2 data, aiming to understand the practical implications of space-based estimation of near-shore bathymetry in shallow, clear-water environments. This internship provided me with valuable hands-on experience in bathymetry methodologies, enhancing my understanding of coastal mapping techniques and their potential applications.

Link: <https://www.terrasolutions.eu/>

UNIVERSITY ENTRANCE RANKING

[20/09/2019 - 10/01/2020]

-Top 5 Performer-

Attaining the 5th position among applicants for admission to University of Crete in the department of physics, I demonstrated academic prowess and dedication to securing my place within the institution. This achievement reflects my commitment to excellence and sets a solid foundation for my academic pursuits at the university level.