

Andreas Loizou

School of ECE Old Buildings, Office 2.1.44 Zografou Campus, 157 73, Athens, Greece

Phone: (+357) 99804157 **Email:** antreas.loizu@gmail.com

LinkedIn: Andreas Loizou **Website:** <http://www.dblab.ece.ntua.gr/people/aloizou/>

Personal Statement

I am a dedicated, organized, and methodical individual. Moreover, I have good interpersonal skills, am an excellent team worker, and am keen and very willing to learn and develop new skills. I am a holder of a BSc in Computer Science and an MSc in Artificial Intelligence and Adaptive Systems. As a PhD student at the National Technical University of Athens, my focus is to develop an innovative solution to tackle the data quality issue on complex data analytics tasks.

Education

National Technical University of Athens

PhD (October 2023 - Now)

- Marie Curie Fellowship with Relax Doctoral Network at Knowledge and Database System Laboratory of NTUA
- Design and develop cutting-edge algorithms for identifying highest quality datasets in large-scale databases
- Build a comprehensive framework for analytic and machine learning operator modelling
- Using data-centric AI design and developing algorithms on improving model performance through enhanced data selection
- Supervisor: Associate Professor Dimitrios Tsoumakos

University of Sussex

MSc Artificial Intelligence and Adaptive Systems (September 2021 - September 2022)

- Final Mark 68/100 - Merit class (US GPA: 3.7/4)
- Machine Learning
- Advance Natural Language Processing
- Image Processing
- MSc Individual Master Project:
 - Ethical Facial Emotion Recognition using Continues Learning.

University Of Cyprus

BSc Computer Science (January 2017 – May 2021)

- Final Mark: 6.83/10 - Very Good (US GPA: 3/4)
- Data Structure and Algorithms
- Professional Practice in Software Engineering: **GitHub link**
 - Build professional software for a company with a group.
 - **Group Leader:** Responsible for software design, organizing with the customer and describing to the group the needs of the customer and what must be implemented.
- Digital Image Analysis
- Diploma Project:
 - Building a 3D Pose Estimation for ARM devices using the MotioNet algorithm.

Apostolos Varnavas Lyceum

Lyceum certificate (2013 – 2015)

- Final Mark: 17.78/20
- Core modules: Physics, Advance Math, Informatics, Physical Education, Greek Language

Skills

Software

- Python (PyTorch, TensorFlow)
- MATLAB
- C and C++
- JAVA
- Unity
- Git
- HTML5, CSS3
- JavaScript
- Node JS
- PHP
- SQL
- Unix/Linux (HPC)
- Docker

Soft

- Problem solver
- Interpersonal Skills
- Hard working
- Team Working
- Ethical Working
- Project planning
- Research

Languages

- English (Full Professional Proficiency)
- Greek (Native)

Work Experience

ICCS - Athens, Greece

Knowledge and Database Systems Laboratory

Research Associate (March 2024 – Now)

Relax DN project:

- Design and implement a framework for data quality monitoring and improving for multi-input datasets for complex analytics tasks
- Design and implement a Data Shapley approximation algorithm to identify a quality value for each data tuple among a large dataset
- Student Representative October 2024 - May 2024
 - Advocate for student interests and concerns within the research program
 - Facilitate communication between students and faculty to enhance the academic experience
- Social Media manager May 2024 - Present
 - Be responsible for the RELAX-DN's social media platform

CYENS (former RISE) - Nicosia, Cyprus

Deep Camera MRG

Research Associate and Computer Vision engineer (October 2022 – November 2023)

- Design and evaluation of algorithms with the use of deep learning and computer vision techniques for the detection of fire and smoke in the wild from a drone camera.
- Construct pipelines and convert the model into TensorRT and deploy them to an embedding device to reduce the latency.
- Construct a message server with RabbitMQ where the detection is transferring using AMPQ topic protocol.
- Deep learning algorithm optimization to reduce time complexity and enhance accuracy.
- Prepare documentation and directly report to the group leader.
- Responsible for data collection and custom labelling and analysis for various research experiments.

CYENS (former RISE) - Nicosia, Cyprus

Deep Camera MRG

All year-round Internship (June 2021 - September 2021)

- Designed a User Interface for Image Evaluation tool with HDR images. The challenges were to render the images using GPU framebuffers and can be display into the User Interface.
- Created a wrapper to command functions of the monitor API which is written in C++ with Python and can be changed by the User Interface.
- Developed research and programming skills. Learn Computer Vision techniques with HDR images.
- Create a server using Flask to communicate the admin panel and the User panel and the experiment results are saved into an SQLite database.
- Coordinated the project and making sure any problems are solved as they arise.

Brainstorm Enterprises Ltd- Larnaka, Cyprus

IT Department

Internship (June 2019 - August 2019)

- Developed sections of the website using HTML and CSS. Designed and manufactured the network of the branches. Handled information of database and retrieved data from the database for the other departments.

Position of Responsibility

Professional Practice in Software Engineering

Group Leader (January 2020 - May 2020)

- Been the group leader build communication between the other groups members and the customer. Develop Time and responsibility management to have ready parts of the software up to date without any Issue.

Publications

1. Loizou, Andreas, and Dimitrios Tsoumakos. " Chunked Data Shapley: A Scalable Dataset Quality Assessment for Machine Learning." The Proceedings of the 34th ACM International Conference on Information and Knowledge Management (CIKM '25), November 2025, Seoul, Republic of Korea.

2. Loizou, Andreas, Nikolaos Andriotis, and Dimitrios Tsoumakos. "VEnOM: A Vector Embedding Operator Modelling Framework." Proceedings of the 19th ACM International Conference on Distributed and Event-based Systems. 2025.
3. Loizou, Andreas, and Dimitrios Tsoumakos. "Data Analysis Prediction over Multiple Unseen Datasets: A Vector Embedding Approach." The 36th International Conference on Database and Expert Systems Applications. DEXA 2025.

Award

1. DEXA 2025 Best Full Research Paper Award

Interested

- Olympic Weightlifting athlete.
- Cypriot and Greek traditional dancing.

Other Information

- Sport Scholarship Tier 3 athlete from University of Sussex (September 2021)
- Served in the National Guard of Cyprus (June 2016 – January 2017)

References provided upon request.