

# elena aloupogianni

Data/ML Engineer

## contact

Eleni (Elena)  
Aloupogianni  
Athens 11146, Greece  
+30 6979608441  
eawrk@outlook.com  
foxelas.github.io

## online cv

foxelas.github.io/cv

## publications

foxelas.github.io/  
publications

## interests

machine learning  
data analysis  
biomedical optics  
image processing  
high-dimensional data  
pattern recognition  
statistical analysis  
predictive modelling  
data visualization

## programming

Python, C#, MATLAB  
R, MS VBA, Kotlin  
MS SQL, PostgreSQL  
HTML, Bash

## tools

L<sup>A</sup>T<sub>E</sub>X, Git, Docker  
PyTorch, Tensorflow  
Visual Studio  
Android Studio  
Google Rest API  
Anvil, Jekyll

## societies

Engineering in  
Medicine and Biology  
Society (IEEE EMBS)  
(ex-member)  
Japanese Society of  
Medical Imaging  
Technology (JAMIT)  
(ex-member)

## education

2019-2022

3y

### Ph.D. (GPA 3.90/4.50)

Tokyo Institute of Science and Technology, Japan  
in Human-Centered Science and Biomedical Engineering,  
Department of Information and Communications Engineering  
Thesis: "Hyperspectral Imaging and Analysis for the Diagnosis of Pigmented  
Skin Lesions during Gross Pathology"  
Supervisor: Associate Professor Takashi Obi ([Obi Laboratory](#))  
Funding: Japanese Government ([Monbukagakusho: MEXT](#)) Scholarship

2017-2019

2y

### M.Eng. (GPA 4.16/4.50)

Tokyo Institute of Science and Technology, Japan  
in Information and Communications Engineering  
Thesis: "Skin Cancer Detection Using Multi-Spectral Macropathology Im-  
ages"  
Supervisor: Associate Professor Takashi Obi (Ohyama-Obi Laboratory)  
Funding: Japanese Government ([Monbukagakusho: MEXT](#)) Scholarship

2017

6m

### Research student

Tokyo Institute of Science and Technology, Japan  
Intensive Japanese language course and preparation for graduate studies

2011-2016

5y

### Joint B.Sc.&M.Sc. (GPA 8.26/10)

National Technical University of Athens, Greece  
in Electrical and Computer Engineering  
Specialization: Signals, Computer Systems, Electronics, Bioengineering  
Thesis: "Application of the Curvelet Transform on Ultrasound Images of the  
Carotid Artery"  
Supervisor: Professor Konstantina Nikita

2008-2011

3y

### High-School Diploma with Honors

Geniko Lykeio Astrous, Arcadia, Greece  
Scored 19.640 points in nationwide university entrance examination.  
Award: Eurobank 'Mprosta' Scholarship for top-ranking score.

## experience

2023-now

1y

### Senior Data Science Engineer

Interactive Coventry Ltd, UK  
AI-driven innovation and product development for industrial, EU, UK and SG-  
funded projects. Focus on generative AI, human-centered engineering, rein-  
forcement learning, digital twin, predictive modelling, and computer vision.

2023-now

1y

### Engineering Consultant

Iris Automation, UK  
Consultation for data science and computer vision. Focus on AI applications  
for heavy industries and manufacturing.

- 2017-2022  
5y **Systems Engineer** Technology Dept., Yamazaki Johosekei IDAY  
Data analysis, modelling and support of financial product pricing and risk management (mainly development in C#, MS SQL, R). Regression testing and verification tool production (mainly MS VBA). Worked in a variety of projects; mainly on Pricing Engines, Multifactor Models, Hull-White and Monte-Carlo Simulations. Additional projects for UI development and rapid prototyping for in-house web applications (mainly Anvil, Python).
- 2017-2022  
5y **Student Leader (Volunteer)** Obi Laboratory, Tokyo Institute of Technology  
Student leader and manager. Handled student mentoring and management, event scheduling, communication management, reporting of student progress and other general affairs in the laboratory.
- 2020-2021  
18m **Teaching Assistant (Contract)** Faculty of Health, Saitama Medical University  
Guidance and assistance in Undergraduate Engineering Workshops (1. Applied Engineering Experiments, 2. Electrical and Electronic Experiments) for the Faculty of Health and Medical Care.
- 2019-2020  
1y **Teaching Assistant (Contract)** GSEP, Tokyo Institute of Technology  
Topic introduction, group-work management and progress evaluation.
- 2018  
2m **Research Assistant (Contract)** Obi laboratory, Tokyo Institute of Technology  
Inter-university project on "Assisting skin cancer macropathological diagnosis using multi-spectral images" in collaboration with Saitama Medical University, Chiba University and Olympus Corporation.

## skills

### Soft

problem-solving, creativity, project management, time management, interpretation, translation, teamwork, consistent performance, good at prioritizing tasks, leadership

### Comm.

public speaking, adaptability in multicultural environments, patient listener, positive attitude, friendly personality

## languages

Greek: ● ● ● ● ● Native

English: ● ● ● ● ○ Near-Native

Japanese: ● ● ● ● ○ JLPT N2

German: ● ● ● ○ ○ Goethe-Zertifikat B2

## **courses**

- 2021 **The Complete 2021 Web Development Bootcamp**  
organized by App Brewery
- Google Tag Manager Fundamentals**  
organized by Google Analytics Academy
- 2020 **Machine Learning, Data Science and Deep Learning with Python**  
organized by Sundog Education
- 2018 **Programming Boot Camp 2018 [Vue.js, Firebase]**  
organized by the Academy of Global Leadership, Yamada Dojo and Guild Works

## **seminars**

- 2021 **The 7th Japan-Russia Joint Forum for Education and Research**  
hosted by Tokyo Institute of Technology (Japan) and Moscow State University (Russia)
- 2019 **The 11th workshop CTF for GIRLS: `Forensics`**  
hosted by SECCON (Tokyo, Japan)
- 2017 **Stanford University's `d.school comes to tokyo tech` Design Challenge Workshop**  
hosted by the Academy of Global Leadership (Tokyo, Japan)
- 2017 **1st workshop CTF for SchoolGIRLS: `web security and cryptography`**  
hosted by SECCON (Tokyo, Japan)
- 2015 **The 8th convention of Electrical Engineering Students ( $\Sigma\Phi\text{HMMY}$ )**  
hosted by UPatras (Patras, Greece)
- Biomedical Technology.. When Medicine meets Technology!**  
hosted by IEEE EMB Greece Chapter (Athens, Greece)
- 2013 **The 6th Convention of Electrical Engineering Students ( $\Sigma\Phi\text{HMMY}$ ), `innovation:the answer of modern engineers in modern quandaries`**  
hosted by NTUA (Athens, Greece)
- 5th e-Learning Expo `Innovation in education for active citizens`**  
hosted by Wide Services (Athens, Greece)
- 2011 **Application development with Windowsphone**  
hosted by Microsoft (Athens, Greece)