# Giorgos Papadakis

Applied Mathematician & Machine Learning Engineer

Address: Dilou 10, Goudi, Athens, Greece

**Phone:** +30 6909664789

Email: giorgospapadakis227@gmail.com LinkedIn: Giorgos Papadakis LinkedIn GitHub: Giorgos Papadakis Github



## **Profile**

A Mathematician / Machine Learning Engineer with a passion for Machine Learning, Data Science, and Teaching. Known for excellent communication skills, adaptability, and fast learning ability.

#### Skills

**Technical Skills:** Machine Learning, Deep Learning, Python, Tensorflow, PyTorch, sklearn, SHAP, R, Computational Mathematics.

Soft Skills: Organization, Communication, Impartiality, Problem Solving, Team Collaboration.

# Experience

#### Machine and Deep Learning Engineer

2023 - Today

Creating machine learning solutions on interesting datasets. See more on my GitHub page.

#### Mathematics Teacher - Secondary Education School "BOLI"

2021 - Today

Teaching mathematics to primary and secondary school students. Also taught university-level statistics.

## Education

#### Master's Degree in Data Science and Machine Learning

2021 - 2023

National Technical University of Athens (NTUA), School of Electrical and Computer Engineering Grade: 8.61 / 10

Thesis: Recognition of Cancer Tumors Using Deep Learning Techniques

- Developed and optimized UNet and Attention UNet models, achieving performance close to state-of-the-art benchmarks.
- Applied advanced image segmentation techniques and model evaluation metrics using TensorFlow and Keras.

#### Bachelor's Degree in Applied Mathematics

2016 - 2020

National and Kapodistrian University of Athens (NKUA), Department of Mathematics Grade:  $7.50\ /\ 10$ 

### Certifications

#### Machine Learning Explainability

2025

Certificate from Kaggle for successfully completing Machine Learning Explainability with Shap Library.

#### Time Series Analysis

2025

Certificate from Kaggle for successfully completing Time Series training with basic and hybrid models.

#### Machine Learning with Python: Zero to GBMs

2023

Certificate from Jovian, representing approximately 60 hours of coursework in machine learning.

# Selected Projects

#### Cancer Tumor Recognition System:

- Designed a deep learning system based on UNet and Attention UNet for image segmentation.
- Achieved close to state-of-the-art results in accuracy metrics.

#### Brain Tumor Classification with Transfer Learning:

- Designed a deep learning system based on Transfer Learning.
- Use of VGG16 as a backbone feature extractor Attention Layer for features enhance and Fully Connected Neural Network as head for the classifiction.
- Achieved close to state-of-the-art results in accuracy metrics.

# Military Service

#### Fulfillment of Military Obligations

2020 - 2021

Served in Samos and Sparta as an infantry soldier with the qualifications of Holmist - General Duties.

## Languages

Greek: Native

English: Advanced (C1 Level)

## **Hobbies**

Reading: Books related to Data Science, Machine Learning, and Deep Learning.

**Sports:** Active athlete of Pankration and member of the Administrative Council of the National Federation of Pankration Athlima as athlete representative.