# NANOS GEORGIOS

Athens, Greece

### **EDUCATION**

# National Technical University of Athens

Oct. 2021– Present

Postgraduate MSc Program: "Data Science and Machine Learning" in ECE (NTUA)

Athens. Greece

### National Technical University of Athens

Oct. 2015 - Oct. 2021

MSc in Electrical & Computer Engineering (5-year joint degree; 300 ECTS)

Athens, Greece

- GPA: 7.33/10
- Concentration: Computer Systems, Signals, Controls & Robotics, Electronics-Circuits-Materials
- Thesis: Acceleration of training of collaborative filtering algorithms, using the programming model HLS for FPGAs
- Advisor: Prof. Pnevmatikatos Dionisios, CSLab

# **High School Graduation**

June 2015

Apolytirion, Valedictorian, GPA: 19.0/20.0; "Distinction"

Volos, Greece

#### PROJECTS & RESEARCH EXPERIENCE

# Research on high level synthesis (HLS) for accelerating performance

Oct. 2020 - Sep.2021

- My thesis written in Greek with title: Acceleration of training of collaborative filtering algorithms, using the programming model HLS for FPGAs.
  - Acceleration of various similarity algorithms in the MPSoC ZCU102 board.

# Digit Recognition - Speech Recognition - Genre Classification

• Projects of Pattern Recognition course in Postgraduate MSc Program "Data Science & Machine Learning".

# Amazon Bin Bucket Challenge

• Training of classical machine/deep learning models and convolutional neural networks (CNNs) to predict the number of objects in an image.

#### Exploratory Data Analysis using R

• Research and analysis of "covid19\_vaccine" dataset which contains a daily summary of the COVID-19 vaccination by country and province.

### **Data Mining**

• Analysis on collection of data on the SARS-Cov-2, with PySpark, Python API for Apache Spark.

# Analysis of Classification & Clustering algorithms

• Analysing out of the box performances before applying preprocessing & grid search techniques for performance.

### Social Network Analysis

• Projects of Social Network Analysis course in Postgraduate Msc programm "Data Science and Machine Learning", dealing with, metrics and Link Prediction for real world networks.

### Google Earth Engine Web Application

• A small web application, for a timelapse of an interactive map, by making use of geemap library.

# Geospatial Analysis

• Geospatial Multispectral Data Analysis of Landsat 8 (L8) satellite collection, in a small area in Greece in the Google Earth Engine Platform along with an interactive application in GEE.

# COURSEWORK & AREAS OF INTEREST

- Machine Learning
- Deep Learning
- Pattern Recognition
- Data Mining
- Social Network Analysis
- Geospatial Data Analysis
- Parallel Architectures
- for Machine Learning
- Statistical Modelling
- Operating Systems

# **INTERNSHIP**

### IDE INTRACOM DEFENSE

Internship in the Department of Control and Testing of Boards

 $\mathbf{Sep.}\ \ \mathbf{2020-Nov.}\ \ \mathbf{2020}$ 

Athens, Greece

I dealt with the microcontroller programming environment (MCUs) of Atmel Studio and I developed code in C for the productive control of an MMI (Man Machine Interface) unit used in the IDE Genairicon system.

### TECHNICAL SKILLS

Communication: Greek (Native), English (Proficient), French(Upper Intermediate)

Programming Languages: Python (strong), R, C (strong), VHDL, Java

Machine Learning Frameworks and Libraries: PyTorch (strong), TensorFlow, Apache Spark (PySpark),

Scikit-learn, Scipy, Numpy, Pandas

Tools-Technologies: Xilinx Vivado, Jupyter, VS Code, vim, Linux Administration, Basic Windows

Administration, Google Earth Engine, LaTex

### HONORS & AWARDS

- Nationwide University Entrance Examination score: 19,075/20,000 (95th highest score of the incoming class)
- "The Great Moment of Education" Scholarship by Eurobank EFG

### **INTERESTS & HOBBIES**

Interests: Machine Learning, Data Analysis, FPGAs

Hobbies: Marathon Runner, Chess, D&D/Videogames, Music, Reading