# **Eleftherios Charteros**

SOFTWARE ENGINEER - DATA SCIENTIST

# Experience \_\_\_\_

**Data Scientist** Athens, Greece PwC Greece October 2021 - Present

• Developed a full-stack web app with NextJS and Django Rest Framework for a Greek Public Service.

- Developed a proof-of-concept BERT-based Chatbot for question-answering in the banking domain.
- · Built a time series forecasting model for Covid-19 new hospitalizations prediction with LSTMs used for decision making during the pandemic.
- · Set up a Dockerized system for monitoring and analyzing multiple applications and receiving businesscritical alerts about their performance and availability.
- Performed gap analysis between databases and provisioned resolution steps for a major insurance company.

**Software Engineer** Rhodes, Greece Nov 2020 - Aug 2021 GREEK ARMY

 Reduced business complexity and automated operations for the Rhodes Officers Club by developing an online ordering and booking management system.

**Research Assistant** Athens, Greece Oct 2019 - Oct 2020 ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

Developed a novel solution for model training in Federated Learning which achieved up to 5% higher accuracy on Non-IID data on early communication rounds by proposing a layer-wise regularization to the loss function

## Education

#### **Athens University of Economics and Business**

MASTER OF SCIENCE IN COMPUTER SCIENCE AND INFORMATICS, GPA: 9.77/10 (EXCELLENT)

• Specialization in Artificial Intelligence/Machine Learning and Information Systems.

## **Athens University of Economics and Business**

4-YEAR BACHELOR OF SCIENCE IN COMPUTER SCIENCE AND INFORMATICS, GPA: 8.88/10 (EXCELLENT)

Information Systems and Information Security.

## Athens, Greece Oct 2015 - Jun 2019

· Specialization in Artificial Intelligence/Machine Learning, Databases and Knowledge Management and

## Certificates \_\_\_\_

#### Microsoft

Azure Fundamentals, Azure Al Fundamentals, Azure Data Scientist Associate

## Research and Publications \_\_\_\_\_

## **Athens University of Economics and Business**

IMPROVING ACCURACY AND PERSONALIZATION IN FEDERATED LEARNING

· MSc Thesis.

### **Athens University of Economics and Business**

EDGE COMPUTING FOR HAVING AN EDGE ON CANCER TREATMENT: A MOBILE APP FOR BREAST IMAGE ANALYSIS

Publication at IEEE, IoT-Health workshop.

Athens, Greece

Athens, Greece

Oct 2019 - Oct 2020

Oct 2020

Athens, Greece

Feb 2020

Languages	
Python, R, Java, Javascript, Typescript, HTML, CSS	
Software & Tools	
Pytorch, Keras, Tensorflow, Flask, Django, React, Docker, Github, Azure DevOps	
Soft Skills	
Goal oriented, Problem solving, Organization and time management, Adaptability and flexibility	
Projects	
For more projects and details see: https://github.com/harteros	
Food Ordering and Room Reservation System with Angular	202
Web application with Angular and Firebase for food orders, haircut reservations and booking system for Rhodes Greek Army Officers Club (lethrodou.gr)	
Sentiment Analysis with Neural Networks	2020
<ul> <li>Sentiment analysis with Multilayer Perceptrons, Recurrent Neural Networks and Stacked Convolutional Neural Networks on the Twitter Sentiment Analysis Dataset.</li> </ul>	
Image Classification with Convolutional Neural Networks	2020
• Experiments with multiple Convolutional Neural Network architectures and variants written in Tensorflow for classifying Fahsion-MNIST images.	
Air Traffic Classification	2019
• A feature engineering and machine learning task for classifying the number of passengers in flights.	
Multilayer Perceptron, Expectation Maximization Algorithms	2019
A simple Multilayer Perceptron written from scratch in Python for classifying MNIST and CIFAR-10 datasets.	
• The Expectation-Maximization algorithm written from scratch in Python for image compression and reconstruction.	
Collaborative Filtering Recommendation System with Android Application	2018
• A recommendation system that suggests to its users the best points of interest based on their check-ins.	
A-Star, Naive Bayes, ID3, AdaBoost Algorithms	2018
Machine Learning algorithms written from scratch in Java.	
Languages	
Greek, Hungarian	
Mother Tongue	

2013

English

Certificate of Proficiency in English, University of Michigan.