Kopalidis Thomas

Contact Details

Phone Number:
00306978497661

Email Address:
thomaskopalidis@yahoo.com

Skills

- Teamwork
- Adaptability
- Problem Solving
- Research
- Decision-Making
- Reliability
- Analysis
- Presentation Skills
- Public Speaking

Languages

Greek – Mother Tongue

English – C2 ECPE

French – B1 CCL

German – A1

Programming Languages

- Python
- R
- C
- Mathematica
- Matlab
- Microsoft Office
- SPSS
- Origin
- Git
- Flask
- MYSQL, SQL
- Pyspark
- SAS

Military Service

Fulfilled (Oct 2019 - June 2020)

Hobbies

Chess, Tennis, Walking, Gym, Travelling, Reading History Books

About Me

I hold a BSc in Physics and an MSc in Health Statistics and Data Analytics. I am a kind, patient, persistent, and altruistic person. I blend analytical thinking with data to turn complexity into clarity. I enjoy solving problems and transforming data into meaningful visual representations. Using PySpark, I efficiently process and analyze large datasets, uncovering patterns and driving data-informed decisions.

Education

MSc in **Artificial Intelligence and Deep Learning**, Electrical & Electronics Engineering of University of West Attica (UNIWA), Athens, Feb 2025 – now

MSc in **Health Statistics and Data Analytics**, **Medical School** of Aristotle University of Thessaloniki, Feb 2022 - Jan 2024, Grade: "**Excellent**".

MSc Thesis on the "**Effect of short-term exposure to ambient temperature on pediatric hospital admissions in Athens**", Sep 2023 – Jan 2024.

BSc in **Physics**, **Science School** of Aristotle University Thessaloniki, Sep 2014 – July 2020, Grade: "**Very good**".

Working Experience

CERTH ITI

Sep 2024 – Feb 2025: Research Assistant and Data Scientist AI4HF

- Worked with Large Language Models (LLMs) combined with Machine Learning (Random Forest) to enhance AI-driven solutions.
- Enhancing the MAGGIC Risk Calculator for personalized mortality risk predictions in chronic heart failure patients.
- Developing an algorithm that:
  -Analyzes patient data.
  -Assigns a MAGGIC score based on predefined thresholds.
  -Provides tailored recommendations (for patients and doctors) based on medical guidelines and the bibliography.
- Improving risk stratification and clinical decision-making through data-driven insights.

Sep 2024 – Feb 2025: Research Assistant and Data Scientist AutoTRUST

- Conducting data analysis and developing CNN-based algorithms for anomaly and sound event detection in limited-resource settings. Searched and used CNN-based algorithms (e.g., MoViNets, X3D) for anomaly detection, focusing on speed and efficiency in limited-resource settings.

Jan 2024 – Feb 2025: Data Scientist and Backend Engineering UPPER

TES_08:

- Developed and integrated algorithms for various transportation modes (bus, car, walking, micromobility, shared car, multimodal trips).
- Implemented algorithms into a web application using Flask.

TES_10:

- Developed algorithms to validate user trips and identify transport modes using GPS data.

Projects

1. Applied **statistical** models using **R**, including **fixed-effects**, **random-effects**.

2. Developed **machine learning** models using **Python** and **R** for **health data** such as **Alzheimer** Dataset and **Heart Failure Prediction** Dataset.

3. **MAGGIC Risk Calculator Enhancement**: Enhanced the MAGGIC Risk Calculator, a machine learning algorithm that provides personalized mortality risk predictions for chronic heart failure patients, improving risk stratification and treatment strategies.

Verified Certifications

- Accelerators and Detectors in Nuclear and Particle Physics
- Cell Biology: Mitochondria HarvardX
- Python
- The use of LASER in Medicine, Clinical Applications and Safe Operation
- Designing Lipid Nanoparticles Systems for COVID-19 Vaccines
- ECESCON12
- European Resuscitation Council
- Google Data Analytics Professional Certificate
- Microsoft Global Cert
- Machine Learning Certificates from London and Duke University
- Advanced Programming with Python.
- Honorary Distinction in School Mathematical Competition
- Information Security Fundamentals (CERTH)

May 2022 – Apr 2023: Research Assistant and Data Scientist REvalue

- Implemented an online service providing data-driven real estate pricing advice.
- Developed a model for accurate house price prediction.
- Conducted research in graphs and transformers.
- Responsible for Deliverable 3.1.

May 2023 – Sep 2023: Research Assistant and Data Scientist INTREPID Citius Altius Fortius

- Developed the machine learning models that supported data integration from UAVs with multiple sensors for environmental assessments.

May 2022 – Apr 2023: Research Assistant and Data Scientist TeNDER

- Actively engaged in the **TeNDER** project, focusing on deep learning methods for signal processing in patients with Parkinson's or Alzheimer's disease.
- Programmed using Pytorch to make the FER framework.
- Performed statistical analysis to assess intervention effectiveness by comparing pre- and post- intervention data evaluating impacts on health and quality of life.
- Integrated a model for Facial expression recognition (FER).
- Conducted Survey and research about FER.
- Responsible for Deliverables D3.3 and D4.2.
- Analyzed sensor data to detect patterns in disease progression for early symptom detection.
- Examined population data to identify treatment response factors enabling personalized, optimized patient care.

Publications

Kopalidis, T.; Solachidis, V.; Vretos, N.; Daras, P. Advances in Facial Expression Recognition: A Survey of Methods, Benchmarks, Models, and Datasets. Information 2024, 15, 135. https://doi.org/10.3390/info15030135.

June 2019 - Sep 2020: Internship and Project – AHEPA University Hospital of Thessaloniki

My BSc **Internship** was in **Medical Physics** and **Data Analysis** at **AHEPA** University Hospital of Thessaloniki. I did my research in **spect imaging** "Applications of spect γ-Camera in the study of the effect of the acquisition radius on the semiquantitative measurements during brain striatum phantom spect imaging".

Dec 2018 - June 2019: Project in EMBS

Organizer in **EMBS** (**Engineering in Medicine and Biology Society**), University Team, AUTH, Thessaloniki.

Sep 2018 – Now: Teaching Experience

Teaching Physics, Mathematics, Biology, Chemistry and Informatics to Adolescents of Secondary School, High School, and Anatolia College.