

Michail Panagiotis Bofos

Utrecht, NL | mbofos@outlook.com | +35797887212 | +31616755813 | LinkedIn | GitHub

Education

Utrecht University , MSc. in Artificial Intelligence	September 2023 – July 2025
• GPA: 7.84/10	
• Coursework: Deep Learning & Pattern Recognition, Evolutionary Computing, Natural Language Processing, Human-Centered Machine Learning, Data Science for Society, AI-Driven Content Generation, Cognitive Modeling	
University of Cyprus , BSc. in Computer Science	September 2018 – June 2022
• GPA: 8.38/10	
• Coursework: Object-Oriented Programming, Computer Organization, Data Structures and Algorithms, Adv. Software Engineering, Parallel Processing, Systems Security, Human-Computer Interaction, Machine Learning, Web Technologies, Calculus I & II, Intro to Probability & Statistics, Theory of Computation	

Experience

Software Engineer , PCN Tech (Part Time, Remote) – Nicosia, CY	November 2023 – Current
• Developed SQL Server views, functions, triggers, and procedures for Back-Office and POS systems	
• Built a database synchronization system between the central and branch SQL Servers for stock control	
• Implemented a CCNET-based Bank Note Acceptor with fault detection and recovery	
• Created a wet stock monitoring system to detect fuel discrepancies and tank leaks	
• Designed an IFSF-based forecourt control system for fuel dispensers and tank gauges via RS232/RS485 and TCP/IP	
Researcher , Networks Research Laboratory (NETRL) – Nicosia, CY	March 2023 – June 2023
• Implemented user authentication using keystroke dynamics and Random Forests	
• Presented developed platforms at internal meetings and EU multiplier events	
Software Engineer & Researcher , Cognitive UX GmbH – Heidelberg, DE	July 2022 – July 2023
• Developed a Virtual Reality art exhibition editor using A-Frame	
• Built responsive front-end interfaces with HTML5, CSS3, and JavaScript	
• Implemented back-end services using Django and PostgreSQL	
• Enabled server-client communication via AJAX	

Projects

Automated detection of positive/non-positive shyness in children from videos	MSc. Thesis Project
• Classified positive/non-positive shyness in videos of 12 and 15-month-old children.	
• Tools & Models Used: SAMURAI, VideoMAE, VideoMamba, VideoLLaVA, XGBoost, Optuna, OpenCV	
Natural Gas Demand Prediction System using Advanced Recursive Neural Networks (LSTM & GRU)	BSc. Thesis Project
• Developed a system for hourly natural gas demand forecasting using meteorological data, implementing LSTM and GRU neural networks	
• Tools & Languages Used: Python, Keras, Pandas, Matplotlib	
Graph bi-partitioning with genetic algorithms	Link to repository
• Solved the graph bi-partitioning problem using MultiStart, Iterated, and Genetic Local Search strategies combined with the Fiduccia-Mattheyses heuristic, optimized via a custom doubly linked list for efficient local search	
• Tools & Languages Used: C#	

Agriculture dashboard Netherlands	Link to repository
<ul style="list-style-type: none"> Developed an interactive web dashboard visualizing Dutch agricultural trends by integrating CBS and FAOSTAT datasets; implemented dynamic choropleth maps and time-series plots; deployed with Docker Compose; enabled real-time refresh using RabbitMQ messaging Tools & Languages Used: Dash (Flask-based), Python, Pandas, Plotly, Docker, RabbitMQ, Bootstrap, PostgreSQL 	
Pokédex — mobile Pokémon recognition app	Link to repository
<ul style="list-style-type: none"> Computer vision system that identifies Pokémon from camera photos using a HuggingFace model Full backend pipeline: FastAPI, Apache Kafka, Redis, PostgreSQL auto-populated via PokéAPI DevOps stack: Containerized microservices with Docker, nginx reverse proxy, ngrok tunnelling; monitoring via Prometheus, Node Exporter, Grafana, and Portainer Mobile app built using React Native 	
TMDb Spark Recommendation Extension — Movie Recommendation System	Link to repository
<ul style="list-style-type: none"> Collaborative filtering movie recommender using Spark ALS and the MovieLens dataset, enriched with TMDb metadata Full backend pipeline: FastAPI API, Redis caching, Spark job orchestration, and TMDb API integration DevOps stack: Multi-container Docker Compose setup with Spark master/worker, backend, Redis, and job-runner services on a custom network Chrome extension frontend for user authentication and personalized recommendations based on TMDb ratings 	
WharfMap — VS Code Docker Compose Visualizer	VS Code Marketplace
<ul style="list-style-type: none"> Built a Visual Studio Code extension that parses Docker Compose YAML files and generates architecture diagrams, with export support for PNG, SVG, and Mermaid Markdown Implemented customizable diagram styling (colors, borders, profiles), interactive pan/zoom navigation, real-time diagram regeneration on file changes and interactive navigation (pan/zoom) to improve inspection of multi-service Docker setups Tools & Languages Used: TypeScript, VS Code Extension API, Mermaid Markdown, YAML parsing 	
Various other projects	github.com/mbofos01

Skills & Tools

Programming Languages: Python, Java, C, C#, C++, Bash, JavaScript, TypeScript, SQL, CUDA, PHP

Libraries/Frameworks: Django, Dash, Plotly, A-Frame, Keras, PyTorch, Optuna, Pandas, OpenCV, OpenSSL, React

Technologies: Docker, Docker Compose, Linux, RabbitMQ, Apache Kafka, Apache Spark, Git, Postman, PostgreSQL, Maven, Redis, Grafana, Nginx

General Tools: MS Word, MS PowerPoint, MS Access, Kanban Flow, DBeaver, VS Code, Wireshark

Spoken Languages: Greek (Native), English (Proficient), French (Basic), Dutch (Minimal knowledge)

Certifications

Oracle: Oracle Cloud Infrastructure 2025 Certified AI Foundations Associate	View Certificate
Oracle: Oracle Cloud Infrastructure 2025 Certified Foundations Associate	View Certificate
IBM: Hands-on Introduction to Linux Commands and Shell Scripting	View Certificate
Google: Crash Course on Python	View Certificate
Google: Foundations of User Experience (UX) Design	View Certificate
Google Cloud Skills Boost: Introduction to Generative AI	View Certificate
HackerRank: SQL (Basic)	View Certificate
HackerRank: Rest API (Intermediate)	View Certificate