



IOANNIS PASTELLAS

# Ioannis Pastellas

AI & Machine Learning Engineer

- Mesa Geitonia, 4000, Limassol, Cyprus
- +357 99341074
- giannispast9@gmail.com
- www.ipastellas.com

## Connect

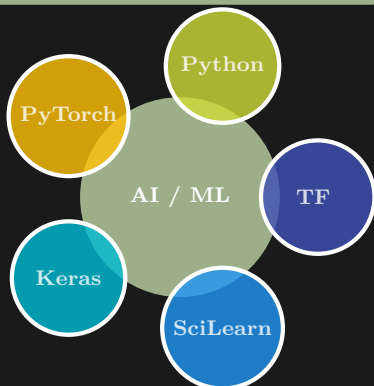
- LinkedIn Profile
- Personal GitHub
- SOCAIT GitHub
- Email Me

## Languages

- Greek (Native)
- English (C1 / Fluent)

## Tech Stack

- Python, Java
- Kubernetes / Docker
- AWS / GCP / Lambda
- SQL, Vector DB
- ReactJs / ReactNative / NextJs



## Experience



### ML Research Associate

Ubitech LTD 06/2021 – Present

- Designed and deployed ML models and web applications for EU-funded research projects (TALON, LAW-GAME, TRITON, CYGNUS, MIRIOPOS, FIDAL).
- DevOps & MLOps:** Configured Kubernetes clusters with Kube-OVN and deployed models using Docker; implemented monitoring via Prometheus and InfluxDB.
- Agentic Pentest:** Developing Automated Pentesting using Agentic AI workflow (Project Active).
- Computer Vision:** Developed and finetuned Computer Vision models (YOLO, CNN) for detecting wildfires and human intruders as well robustifying such models under Adversarial Attacks
- Network Intelligence:** Engineered AI modules to predict network resource demand, improving resource allocation efficiency by **15%** (Published research).
- Anomaly Detection:** Developed Autoencoder and LSTM-based models for detecting anomalies in network flows and behavioral analysis, Network Intrusion Detection System.
- Explainable AI:** Conducted research on Explainable AI (XAI) tools (LIME, GradCAM).



### ML Research Engineer

Wargaming Group 01/2024 – 06/2024

- Offline RL** Trained different Offline RL policies (IQL, CQL, BC, AWAC) on big logged real game data (appr. 100GB) of the World of Tanks Game as well as on simplified World of Tanks Environment (Simulation, Grid Game).
- Off-Policy Evaluation (OPE):** Collaborated with R&D to validate RL agent performance using OPE, on World of Tanks simplified environment.
- OPE Case Study** Develop a OPE repo for running OPE (FQE, Model-Based Dynamics, Importance Sampling) for evaluating Offline RL policies (d3rlpy, torch)
- Benchmarked the OPE pipeline for **Halfcheetah** and **World Of Tanks** environments, to validate and compare performance.



### Teaching Assistant

University of Cyprus 01/2025 – Present

Assisted in "Computational Neuroscience" masters course in English. Delivered tutorials on HHsim, Neuron, and Brian tools; graded assignments and mentored students.



### Data Scientist Intern

AC Goldman Solutions 06/2020 – 08/2020

- Developed a Credit Scoring Machine Learning model for the banking sector.
- Implemented XAI techniques to interpret model decisions and built a Flask-based UI.

## Education



### MSc in Artificial Intelligence

University of Cyprus 2022 – 2024

General Grade: **8.94/10**. (Taught in English)

*Thesis:* "Offline Reinforcement Learning in World of Tanks". Conducted in collaboration with Wargaming Group (see Work Experience).



### BSc in Computer Science

University of Cyprus 2017 – 2021

General Grade: **8.31/10**.

Focused on Computational Intelligence, Information Retrieval, and Probability Statistics.

Ioannis Pastellas

AI & Machine Learning Engineer

About Me

AI & Machine Learning Engineer with an MSc in Artificial Intelligence and expertise in building full-stack AI solutions and research. Keen on Learning more about AI and especially Agentic Systems, Reinforcement Learning, AI safety. My vision is to help optimize Society through Artificial Intelligence.

Certifications

- **Practical RL (Honors)**  
*HSE University (Coursera)*
- **AI Infrastructure and Operations Fundamentals**  
*NVIDIA (Coursera)*
- **DevOps, DataOps, MLOps**  
*Duke University (Coursera)*
- **Learning How to Learn: Powerful mental tools to help you master tough subjects**  
*Deep Tech Solutions (Coursera)*
- **CyberHOT Summer School**  
*Cybersecurity Hands-on Training*

Key Courses

- Machine Learning (9.5/10)
- Natural Language Proc. (9.0/10)
- AI Ethics (9.0/10)
- Algorithms & Complexity (9/10)

Interests

- 🎸 Electric Guitar (Self-Taught)
- ⚽ Football

Personal Projects



SyntraFit (AI Fitness Agent)

React Native, FastAPI, AWS Mobile App

Developed an AI-driven fitness agent published on the App Store. Integrated LLMs via LangChain and Pinecone for personalized workout/nutrition planning. Built the mobile frontend with React Native and backend with Django/FastAPI.



SOCAIT: A Society of Agents

Agents, Social Optimization, Reasoning

Developing a "society" of AI agents to help optimize our society. By building AI-first products that augment humans, and creating open source AI agents that contribute to Societal Optimization

Publications

- 2024
- AI-fuelled Dimensioning and Optimal Resource Allocation of 5G/6G Wireless Communication Networks  
*P. Papaioannou, I. Pastellas, C. Tranoris, S. Karagiorgou, S. Denazis*  
IEEE MeditCom (pp. 413-418)
- 2024
- Adversarial Explanations for Informed Civilian and Environmental Protection  
*T. Anastasiou, I. Pastellas, S. Karagiorgou*  
IEEE International Conference on Big Data (pp. 2672-2681)
- 2025
- Explanation-Driven Adversarial Attacks against Multimedia Edge Applications  
*T. Anastasiou, I. Pastellas, S. Karagiorgou, M. Konidi*  
6th International Conference in EEITE, Greece
- 2025
- Adaptive Policy-Driven Network Intelligence for Edge-to-Cloud Continuum  
*I. Pastellas, S. Karagiorgou, M. Konidi*  
31st ICE IEEE/ITMC Conference (Valencia, Spain)

Awards

Highest Overall Grade

Lanitio Lyceum Academic

Awarded for achieving the highest overall grade in Mathematics & Physics in the school year.