

# Nikiforos Mandilaras

+30 6983878563 • nikmand@outlook.com • Athens, Greece  
in linkedin.com/in/nmandilaras • github.com/nmandilaras • nmandilaras.github.io

## Work Experience

- Taboola** **Remote**  
*Senior Machine Learning Engineer - Tech Lead* *Nov. 2021 – Present*
- Working with state of the art algorithms and technologies in a large scale Recommender System.
  - Applying LLMs for representation learning, leveraging fine-tuned embeddings in multiple downstream tasks.
  - Developed a new candidate generation model using Vespa, leveraging a two-tower architecture to efficiently provide online ranking of suitable items.
  - Delivered an incremental learning framework with 12x faster training and deployment cycles, achieving revenue lift.
  - Part of the algo expert team, leading high-priority initiatives, designing workflows, and providing guidance and code reviews for the rest of algo department.
- Ubitech** **Remote**  
*Machine Learning Engineer* *June 2021 – Nov. 2021*
- Designed ML solutions for smart-grid use cases (self-consumption optimization, energy savings estimation, flexibility prediction) and collaborated with research and engineering teams to deliver working energy-domain prototypes.
- Intracom Telecom** **Athens, Greece**  
*Data Scientist / Big Data Engineer* *May 2018 – May 2020*
- Engineered ML features for telco products, including load forecasting, grid optimisation, and resource allocation.
  - Built Big Data applications for telco and banking clients on Hadoop, including high-throughput ingestion pipelines and complex data analysis.

## Education

- National Technical University of Athens** **Athens, Greece**
- MSc. in Data Science and Machine Learning, 9.61/10* *Oct. 2018 – Aug. 2020*  
Master Thesis in Resource Allocation with Deep Reinforcement Learning Methods.
  - Integrated Master in Electrical and Computer Engineering, 8.44/10* *Sept. 2012 – Feb. 2018*  
Major in Computer Science: Software, Computer Systems & Networks - Master Thesis in the area of Big Data.

## Technical Skills

**Prog. Languages:** Python, Java      **DataBases:** Vespa, BigQuery, Elastic  
**Deep Learning:** PyTorch, TensorFlow, Keras, LLMs      **MLOps:** Airflow, Jenkins, Graphana, K8s  
**ML & Big Data:** Apache Spark, Kafka, Hadoop      **GenAI:** Cursor, Claude Code

## Selected Projects

**Deep Reinforcement Learning:** Developed a RL agent for managing last-level cache sharing in multi-core systems, improving SLA performance on a critical service and accelerating best-effort applications by 4x.

**Self Supervision:** Created sophisticated embeddings that improved recommendation accuracy, boosting revenue for users with poor signal history.

**LLM-Based Embedding Pipeline:** Designed and built a distributed production pipeline that generates item embeddings for ad recommendations. Used LLMs for description enrichment and embedding generation. Powers downstream recommendation models with continuously updated item representations.

## Additional Info

**Languages:** English (C2) & French (B2)      **Honors:** C. Papakyriakopoulos Math Award – N. Kritikos Scholarship  
**Military Service:** Fulfilled Sept. 2020 - June 2021

## Publications

P. Katsileros, N. Mandilaras et. al. An Incremental Learning framework for Large-scale CTR Prediction. 16th ACM Conference on Recommender Systems. RecSys '22 - Seattle, WA, USA.