

# Panagiotis Souranis

Data Scientist · ML/Data Engineer · Software Engineer

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## Summary

- 5+ years of working experience in data science and machine learning, delivering data-driven solutions. Skilled in advanced analytics, modeling, and visualization to extract actionable insights from diverse datasets.
- Bachelors degree with Distinction in Mathematics and Masters degrees in Statistics and Artificial Intelligence, both with High Distinction. Strong academic background in mathematics, statistics, and artificial intelligence.
- Enjoy team work, continuous learning and development.
- Keen in researching and applying novel ideas to solve real problems using data science and machine learning.

## Experience

### Deutsche Telekom

Thessaloniki, Greece

Senior Data Scientist

Sept. 2024 - Present

- Developed a multi-modal outlier detection framework integrating LSTM-based autoencoders, density-based clustering, and distance-based approaches for real-time anomaly detection in streaming data.
- Engineered framework integration with existing IT infrastructure and cloud platforms for efficient deployment and real-time anomaly alerting in high-velocity data streams.
- Utilized Apache Airflow to design and orchestrate machine learning pipelines for streaming data processing and model deployment.

### Altair Engineering

Thessaloniki, Greece

Senior Data Scientist

May. 2022 - Aug. 2024

- Developed natural language processing (NLP) capabilities for data exploration within an analytics platform.
- Implemented an NLP-driven chatbot for enhanced user support and self-service accessibility.
- Led end-to-end feature development within a data analytics platform, focusing on MLOps and AutoML to enhance model management efficiency, accuracy, and scalability.
- Collaborated on strategic roadmap definition for a data analytics suite across multiple release cycles.

### Accenture

Thessaloniki, Greece

Data Science Senior Analyst

May. 2021 - May. 2022

- Utilized distributed computing frameworks (Apache Hadoop, Apache Spark) and cloud platforms (AWS, GCP) for scalable data processing.
- Applied advanced machine learning techniques for telecommunications equipment failure prediction, achieving 80% accuracy via historical network performance data analysis.

### Deus Ex Machina AI

Thessaloniki, Greece

Data Scientist

Feb. 2020 - May. 2021

- Developed an NLP system using transformer models along with classical machine learning clustering algorithms for entity relation extraction from over 100,000 biomedical articles, enhancing knowledge discovery.
- Developed machine learning models for early disease detection to facilitate personalized interventions.
- Created AutoML solutions, accelerating model iteration cycles by 40% and improving model performance and deployment timelines.

## Education

### Aristotle University of Thessaloniki

Thessaloniki, Greece

Master of Sciences in Statistics (Dept. of Mathematics)

Oct. 2018 - Feb. 2021

- Thesis title: Monte Carlo methods. Applications in Deep Learning. GPA: 8.98 / 10.0.
- First class honours.

### Aristotle University of Thessaloniki

Thessaloniki, Greece

Master of Sciences in Artificial Intelligence (Dept. of Computer Science)

Oct. 2018 - Jul. 2020

- Thesis title: Forecasting and smoothing methods for time series data. GPA: 9.59/10.0.
- First class honours (Second highest GPA).

### Aristotle University of Thessaloniki

Thessaloniki, Greece

Bachelor of Science in Mathematics (Dept. of Mathematics)

Sep. 2013 - Jan. 2018

- 4 years equivalent degree. GPA: 8.13/10.0
- Received commendation, top 5% of my class.

## Skills

Programming	Python	SQL	C++ / CUDA	R	Java	Mathematica	MATLAB	TeX
ML/Data Eng.	Pytorch	Keras	Tensorflow	Scikit-learn	LangChain	Llama-index	SpaCy	MLflow
	Transformers	PySpark	BigQuery	Airflow	dbt	FastAPI		
DevOps	Terraform	AWS Sagemaker	Azure ML	Vertex AI	Docker	Kubernetes	Git	Linux
Languages	English	Greek						

## Awards

### Prediction Agent Hackathon (Best Trader Agent Tool or Enhancement)

Roundup | 

1st place.

[Oct. 2023](#)

- Hackathon to push forward the use of crypto AI agents in prediction markets.
- Developed tools and enhancements for AI mech - a tool leverages LLMs to analyze and provide outcome probabilities on questions.

## Certificates

### Data Engineering Specialization

Certificate

3 month program in Data Engineering.

[Oct. 2024](#)

- In this 3-month Data Engineering specialization by DeepLearning.AI, I learned to conceptualize, build, and maintain integrated data systems that operate continuously in production. I developed a comprehensive understanding of the data engineering lifecycle, including data ingestion, storage, transformation, and serving. This program equipped me with the necessary skills to design effective data architectures on AWS and manage data pipelines that meet stakeholder requirements. Additionally, I gained hands-on experience in applying best practices for data management and architecture, which are critical for delivering value in various industries.

### IBM Applied DevOps Engineering Professional Certificate

Certificate

3 month program in DevOps.

[Aug. 2023](#)

- In this 2 month program, I embraced DevOps. I developed RESTful microservices, test with TDD methods, practice CI/CD, and deploy using serverless and container technologies like Kubernetes. Also, I developed and executed unit tests with test driven development (TDD) methods including coverage reports, factories, fakes, and mock objects.

### Machine Learning Engineering for Production

Certificate

4 month program in MLOps.

[Jan. 2022](#)

- In this 4 month program (specialization), I learned how to conceptualize, build, and maintain integrated systems that continuously operate in production. I managed to design an ML production system end-to-end learning about the challenges and the necessary skills needed to succeed in this area. I was able to establish data lifecycle by leveraging data lineage and apply techniques to manage modeling resources and best serve offline/online inference requests. Lastly, I learned how to apply best practices and delivery techniques to maintain a continuously operating production system.

### Oxford Machine Learning Summer School (OxML)

Certificate

2 month program in Machine Learning & Finance.

[Jul. 2023](#)

- In this 2 month program, I explored new frontiers in the field. I learned how Machine Learning is applied in the investing industry sector and I got up to date with the latest methodologies for trading and hedging, building market simulators and also leveraging Natural language processing for making more accurate predictions.