

# Charidimos Papadakis

Incoming PhD Student, MIT Operations Research Center (Fall 2026)

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## EDUCATION

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### Massachusetts Institute of Technology

PhD, Operations Research Center (MIT ORC)

Incoming, Fall 2026

Cambridge, MA, USA

Advisor: Prof. Dimitris Bertsimas

### National Technical University of Athens

MEng, Electrical & Computer Engineering (Diploma – 300 ECTS)

2020 – 2025

GPA: 9.77/10.0 — Class Rank: 5<sup>th</sup>

Diploma Thesis (Grade: 10/10): “Adaptive Multi-Agent LLM Systems for Financial Trading: A Framework for Realistic Simulation and Dynamic Prompt Optimization” ([link](#)).

Supervisor: Prof. Giorgos Stamou

## PUBLICATIONS

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- **ATLAS: Adaptive Trading with LLM Agents Through Dynamic Prompt Optimization and Multi-Agent Coordination.**  
Charidimos Papadakis, Angeliki Dimitriou, Giorgos Filandrianos, Maria Lymperaiou, Konstantinos Thomas, Giorgos Stamou.  
Accepted at **ACL 2026 Main Conference**. ArXiv: [2510.15949v3](https://arxiv.org/abs/2510.15949v3).  
*An adaptive prompt-optimization framework that improves coordination and decision quality among LLM-based trading agents in dynamic markets.*
- **StockSim: A Dual-Mode Order-Level Simulator for Evaluating Multi-Agent LLMs in Financial Markets.**  
Charidimos Papadakis, Giorgos Filandrianos, Angeliki Dimitriou, Maria Lymperaiou, Konstantinos Thomas, Giorgos Stamou.  
Planned for submission to **EMNLP 2026 System Demonstrations Track**. ArXiv: [2507.09255](https://arxiv.org/abs/2507.09255).  
*A high-fidelity, dual-mode simulation environment for reproducible evaluation of LLM agent strategies and behavior under realistic order flows.*

## EXPERIENCE

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### Veltiston AI

AI Software Engineer

Athens, Greece

May 2025 – Present

- Designed an agentic RAG system for document analysis, deployed as a Microsoft Word add-in; coordinated multi-step retrieval over external document corpora with grounded citation generation.
- Developed agent orchestration for query decomposition, evidence aggregation, and answer synthesis under context-length and latency constraints.
- Contributed to a hospital operating-room scheduling platform: defined KPIs and built data pipelines from clinical systems to support downstream optimization.

### Netcompany–Intrasoft

Software Engineering Intern

Athens, Greece

Jul 2024 – Sep 2024

- Contributed to backend services for the Austrian Customs Clearance System, a large-scale public-sector software project.

### RiverTech

AI Engineering Intern

Athens, Greece

Jul 2023 – Sep 2023

- Developed machine learning models on IoT smart-home data for behavioral pattern recognition, supporting energy optimization research.

## TEACHING

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**National Technical University of Athens – School of ECE**

Athens, Greece

*Undergraduate Teaching Assistant*

*Feb 2022 – May 2022*

- Supported *Introduction to Programming* and *Programming Techniques*: led C++ lab sessions and gave feedback on student assignments.

## SKILLS

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**Programming:** Python, C/C++, Java, JavaScript/TypeScript, SQL

**LLMs & Agentic AI:** LangChain, LangGraph, Hugging Face Transformers, Prompt Engineering & Optimization, RAG, Vector Databases, Multi-Agent Orchestration, MCP

**ML / Deep Learning:** PyTorch, TensorFlow, Scikit-learn, Ray, NumPy, pandas, matplotlib

**Backend & Web:** FastAPI, Spring Boot, Node.js, Next.js, React, REST APIs, Celery

**Systems & Tooling:** Docker, RabbitMQ, MySQL, AWS S3, Git, Linux/Unix

**Languages:** Greek (Native), English (C2), German (C1)