Nicholas Assiotis

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PERSONAL DETAILS

Swiss-Cypriot Machine Learning Engineer with international industry and research experience, specialising in AI for FinTech, data science, and consulting applications. Skilled in reinforcement learning, neural networks, and predictive modelling, with published research (**ECAI 2025, SPIE 2025**) and collaborations with **Harvard Medical School**. Proven ability to lead multicultural teams and deliver data-driven solutions that bridge technical expertise with strategic business insight. Driven to apply AI and data science to financial systems and decision intelligence within the FinTech sector.

EXPERIENCE

Machine Learning Engineer — October 2024 – September 2025
LTGame Limited — *Remote, Macau SAR*
- Designed and deployed a Reinforcement Learning-powered gaming bot, adopted by students across **5 universities** for adaptive play and in-game assistance.
- Enhanced bot adaptability and competitiveness, improving engagement at varied difficulty levels.
- Managed communication and coordination across **3+ international teams**, bridging **technical** and **non-technical** members.

Undergraduate Research Intern - UROP 2024 — July 2024 – December 2024
KIOS Research and Innovation Center of Excellence — *Nicosia, Republic of Cyprus*
- Applied CNNs to dynamic medical datasets, achieving **projected 91% classification accuracy.**
- Reduced data analysis time and improved model performance through PyTorch optimization.
- **Authored research** published in SPIE 2025 [1], presented in collaboration with **Harvard Medical School**

Chief Executive Officer - Junior Achievements — October 2019 – June 2020
The Last Straw — *Nicosia, Republic of Cyprus*
- **Founded** and **led** a student-run company producing sustainable reusable straws, **reaching 500+** customers.
- Drove **initiatives** focused on promoting environmental sustainability and **raising awareness** about the harmful effects of single-use plastic

EDUCATION

University of Leiden — Leiden, Netherlands
Master of Science in Computer Science (Artificial Intelligence Specialisation) — *Sep. 2025 – Present*

University of Groningen — Groningen, Netherlands
Bachelor of Science in Artificial Intelligence — *Sep. 2022 – July 2025*
- Bachelor thesis: Air Pollution Forecasting in the Randstad using Graph Neural Networks (graded 8.5/10).
- First-author, peer-reviewed publication (extension of bachelor's thesis) @ ECAI 2025, PMLR Proceedings [2].

PROJECTS

Enhanced DDPG: Introduced adaptive target updates, reducing training convergence time by 30% for continuous decision-making tasks.

Financial Forecasting with Neural Networks (FinTech application): Developed neural network model that achieved 23% SMAPE, outperforming baseline financial trend models.

PUBLICATIONS

[1] Nicholas Assiotis et al. "Deep learning classification of en face multi-spectral optical coherence tomography images". In: *Optical Coherence Tomography and Coherence Domain Optical Methods in Biomedicine XXIX*. Ed. by Rainer A. Leitgeb and Yoshiaki Yasuno. Vol. 13305. International Society for Optics and Photonics. SPIE, 2025, 133050T. DOI: 10.1117/12.3042820. URL: https://doi.org/10.1117/12.3042820.

[2] Nicholas Assiotis et al. "Physics-Informed Graph Neural Networks for Air Pollution Forecasting in the Netherlands". In: *Proceedings of the 2nd ECAI Workshop on "Machine Learning Meets Differential Equations: From Theory to Applications"*. Ed. by Cecília Coelho et al. Vol. 277. Proceedings of Machine Learning Research. PMLR, 26 Oct 2025, pp. 47–70. URL: https://proceedings.mlr.press/v277/assiotis25a.html.

SKILLS

Programming Languages: Python, C, C++, R, SQL, JavaScript, HTML/CSS
Frameworks: TensorFlow, PyTorch, NumPy, OpenCV, FastAPI
Languages: English (Native), Greek (Native), German (Beginner – in progress)
Soft Skills: Analytical Thinking, Leadership, Communication, Research Collaboration, Public Speaking