Yorgos Felekis

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EDUCATION Doctor of Philosophy (Ph.D.), Machine Learning Oct. 2022 – present University of Warwick Coventry, UK • Area: Causality, Causal Representation Learning, Digital Twins • Advisors: Prof. Theodoros Damoulas & Dr. Fabio M. Zennaro • Member of the Warwick Machine Learning Group • Enrichment student at the Alan Turing Institute (Oct. 2024 - Jul. 2025) Sep. 2019 – Sep. 2020 Master of Science (M.Sc.), Machine Learning University College London - UCL London, UK • Degree awarded with Distinction • Thesis: "Generalised Variational Inference posteriors in Probabilistic Deep Learning" (Distinction) • Area: Probabilistic Machine Learning, Bayesian Inference • Advisors: Prof. Theodoros Damoulas and Prof. Brooks Paige Bachelor of Science (B.Sc.), Mathematics Oct. 2014 – Jul. 2019 National and Kapodistrian University of Athens Athens, GR • Degree awarded with First Class Honours • Specialization Area: Applied and Computational Mathematics Publications Causal Optimal Transport of Abstractions 2024 • Felekis Y., Zennaro F.M., Branchini N., Damoulas T., Causal Learning and Reasoning (CLeaR), 2024 2024 Causally Abstracted Multi-armed Bandits • Zennaro F.M., Bishop N., Dyer J., Felekis Y., Calinescu A., Wooldridge M., Damoulas T., Uncertainty in Artificial Intelligence (UAI), 2024 Interventionally Consistent Surrogates for Agent-based Simulators 2024 • Dyer J., Bishop N., Felekis Y., Zennaro F.M., Calinescu A., Damoulas T., Wooldridge M., Neural Information Processing Systems (NeurIPS), 2024 2022 Probabilistic Deep Learning with Generalised Variational Inference • Felekis Y., Damoulas T., Paige B., 4th Symposium on Advances in Approximate Bayesian Inference (AABI), 2022 The generalized λ -Constant Function Market Makers 2022 • Felekis Y., Kristensen J., IEEE Blockchain, 2022 2022 Cryptocurrency price prediction with Multi-task Multi-step Sequence-to-Sequence Modeling • Kristensen J., Madrigal-Cianci J.P., Felekis Y., Liatsikou M., IEEE Blockchain, 2022 ex-GPT: An Extractive-Abstractive Summarization Framework with a Sentence Embeddings Twist 2020 • Minto L., Kmec J., Felekis Y., Filippi G., preprint Deep Learning for Agricultural Land Detection in Insular Areas 2019• Charou E., Felekis Y., Bournou D., Maria Koutsoukou M., Panagiotopoulou A., Voutos Y., Bratsolis E., Mylonas P.,

Likforman-Sulem L., 10th International Conference on Information, Intelligence, Systems and Applications (IISA), 2019

Research Engineer

Dec. 2021 - Jul. 2022 Berlin, DE Advanced Blockchain AG

• Work on the intersection of Artificial Intelligence and Blockchain technology and the mathematical aspects of DeFi. Specifically, study of the Automated Market Makers' dynamics via Multi-agent Reinforcement Learning Simulations and Adversarial Learning.

• Organizer of the weekly Research seminar (paper reviews, invited talks, brainstorming sessions).

Machine Learning & Data Science Consultant

Aug. 2021 - Dec. 2021

Ernst & Young (EY)

Athens, GR

• Work on AI-related platforms and technologies with a focus on Natural Language Processing and Natural Language Understanding at the IBM TechHub of EY. In particular, the work was focused on Text Classification, Document Retrieval, QA, and summarization tasks.

Machine Learning Engineer

Jan. 2021 – Jun. 2021

LangAware

Athens, GR

• Design and develop productised and deployed machine learning models for predicting neurodegenerative diseases with Natural Language Processing techniques. Specifically, work on Dementia, Alzheimer and Parkinson's diseases.

Visiting Researcher

Sep. 2019 – Sep. 2020

National Centre for Scientific Research "Demokritos"

Athens, GR

• Mentoring and supervising internship projects of undergraduate students, as part of their BSc Diploma.

Research Scientist

Dec. 2018 – Aug. 2019

National Centre for Scientific Research "Demokritos"

Athens, GR

- Experimentation with Transfer Learning techniques with popular neural network architectures (AlexNet, ResNet, VGG16).
- Creation of a Sentinel-2A based dataset called "Ionio dataset" and training of a Convolutional Neural Network in order to classify Agricultural and Non-Agricultural land cover. (see publication below)
- Organise multiple workshops as the main speaker for students and researchers on Deep Learning techniques and their applications to Remote Sensing.

Research Intern

Aug. 2018 – Dec. 2018

National Centre for Scientific Research "Demokritos"

Athens, GR

• Literature review of SOTA Deep Learning models for remote sensing image processing and satellite imagery.

Honours & Awards

Alan Turing Institute Placement Award

Oct. 2024 - Jul. 2025

• Awarded as part of the Enrichment Scheme, to PhD students from across the UK to spend 9 months in the Alan Turing Institute. Includes £1500 of funding to boost research.

Fully funded PhD position

Oct. 2022 – Apr. 2026

• Awarded via the UKRI Turing AI Acceleration Fellowship [EP/V02678X/1]: "Machine Learning Foundations of Digital Twins", awarded to Prof. Theodoros Damoulas

Onassis Scholarship for Doctoral Studies

Oct. 2022 - Oct. 2025

• Awarded in recognition of outstanding academic performance.

SUPERVISION

Luke Padmore, MSci Data Science Thesis co-supervise with Prof. Theo Damoulas and Dr. Fabio M. Zennaro	Oct. 2024 – Jul. 2025 University of Warwick
Tanatip Timtong, BSc Computer Science Thesis co-supervise with Prof. Theo Damoulas	Jul. 2022 – Apr. 2023 University of Warwick
Mary Karatzoglidi, Research Internship	Sep. 2019 – Jan. 2020
co-supervise with Dr. Eleni Charou	NCSR "Demokritos"

LANGUAGES

Greek: Native

English: Fluent

Think, Reason and Learn in Multi-Scale Causal Systems CS & Stats PhD research seminar	Nov. 2024 University of Warwick, Coventry, UK
Causal Optimal Transport of Abstractions Algorithms & Computationally Intensive Inference Seminar	May 2024 University of Warwick, Coventry, UK
Causal Optimal Transport of Abstractions Stanford AI Lab	Apr. 2024 Stanford University, Palo Alto, CA, USA
Causal Optimal Transport of Abstractions (poster) Causal Learning and Reasoning (CLeaR)	Apr. 2024 UCLA, Los Angeles, CA, USA
Bridging micro and macro causal realms Warwick Postgraduate Colloquium in Computer Science	Dec. 2023 University of Warwick, Coventry, UK
Probabilistic Deep Learning with Generalised Variational Inference (postath Symposium on Advances in Approximate Bayesian Inference	Feb. 2022 Virtual Event
MSc Thesis Presentation NCSR "Demokritos" Machine Learning seminar series	Jan. 2021 NCSR "Demokritos", Athens, GR
Machine Learning methods for satellite image processing 55th Summer School of NCSR "Demokritos"	Jul. 2020 NCSR "Demokritos", Athens, GR
Deep Learning for Agricultural Land Detection in Insular Areas 10th International Conference on Information, Intelligence, Systems and Applications	Jul. 2019 University of the Peloponnese, Patras, GR
Deep Learning trends & techniques Computational Intelligence Lab seminar	Sep. 2019 NCSR "Demokritos", Athens, GR
Convolutional Neural Networks for Land Use Land Cover classification Computational Intelligence Lab seminar	May 2019 NCSR "Demokritos", Athens, GR
Organization	
Physics-informed Machine Learning seminar series Explores real-world applications of Φ -ML methods to the engineering practice.	Nov. 2024 – present The Alan Turing Institute, London, UK
Advanced Topics in Machine Learning WMLG reading group Focus: Causality, Robustness, Statistical Machine Learning.	Jan. 2023 – Jan. 2025 University of Warwick, Coventry, UK
Three-day Hackathon Causal discovery for cancer; Learning to run a power network; Low cost climate prediction	Apr. 2023 University of Cambridge, Cambridge, UK
Computational Intelligence Lab seminar Organized workshops, seminars and invited talks	May. 2019 – Sep. 2019 NCSR "Demokritos", Athens, GR
Academic Service	
• AAAI Conference on Artificial Intelligence 2025	
TECHNICAL SKILLS	
Languages & Developer Tools: Python, Matlab, Julia, Git, Google Cloud Plat Libraries: PyTorch, Keras, Scikit-learn, Pandas, NumPy, Matplotlib	form, IBM Watson

French: Intermediate

Spanish: Beginner