

# Periklis Mantenoglou

## Curriculum Vitae

### Education

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| 2019 -<br>2024 | <b>PhD</b> in the Department of Informatics and Telecommunications of the National & Kapodistrian University of Athens, Greece.<br><b>Thesis Title:</b> “Reasoning over Complex Temporal Specifications and Noisy Data Streams”.     |
| 2014 -<br>2019 | <b>Integrated Master’s Degree</b> in Electrical & Computer Engineering at the National Technical University Of Athens, Greece.<br><b>GPA:</b> 9,04/10.<br><b>Thesis Title:</b> “Online Probabilistic Interval-based Event Calculus”. |

### Experience

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| 2025 -<br>now  | <b>Postdoctoral researcher</b> at MPI lab, Örebro University, Sweden.  |
| 2024           | <b>Postdoctoral researcher</b> at CER group, NCSR “Demokritos”, Greece.  |
| 2019 -<br>2024 | <b>Research associate</b> at CER group, NCSR “Demokritos”, Greece.   |
| 2018           | <b>Internship:</b> Development of a Chess Strategy Recognition System at CER group, NCSR “Demokritos”, Greece. |

### Publications

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| 2026 | <i>Mantenoglou P., Bonassi L., Scala E. and Zuidberg Dos Martires P.</i> , <b>Two Constraint Compilation Methods for Lifted Planning</b> . In 40th AAAI Conference on Artificial Intelligence (AAAI).   |
| 2025 | <i>Mantenoglou P. and Artikis A.</i> , <b>Composite Event Recognition with Arbitrary Specifications</b> . In Information and Computation Journal.<br><i>Mantenoglou P., Pitsikalis M. and Artikis A.</i> , <b>Reasoning over Streams of Events with Delayed Effects</b> . In Journal of Artificial Intelligence Research (JAIR).<br><i>Mantenoglou P., Hazra R., Zuidberg Dos Martires P. and De Raedt L.</i> , <b>LexiCon: a Benchmark for Planning under Temporal Constraints in Natural Language</b> . In 39th Annual Conference on Neural Information Processing Systems (NeurIPS). |

- Mantenoglou P. and Artikis A., Sequencing in the Run-Time Event Calculus.* In 28th European Conference on Artificial Intelligence (ECAI).
- Mantenoglou P. and Artikis A., Temporal Specification Optimisation for the Event Calculus.* In 39th AAAI Conference on Artificial Intelligence (AAAI).
- Kouvaras A., Mantenoglou P. and Artikis A., Generating Activity Definitions with Large Language Models.* In 28th International Conference on Extending Database Technology (EDBT).
- 2024 *Andrienko N., Andrienko G., Artikis A., Mantenoglou P. and Rinzivillo S., Human-in-the-Loop: Visual Analytics for Building Models Recognising Behavioural Patterns in Time Series.* In IEEE Computer Graphics and Applications (CG&A).
- Mantenoglou P., Extending the Range of Temporal Specifications of the Run-Time Event Calculus.* In 31st International Symposium on Temporal Representation and Reasoning (TIME).
- 2023 *Mantenoglou P., Artikis A. and Paliouras G., Online Event Recognition over Noisy Data Streams.* In International Journal of Approximate Reasoning (IJAR).
- Mantenoglou P., Pitsikalis M. and Artikis A., Complex Event Recognition with Allen relations.* In 20th International Conference on Principles of Knowledge Representation and Reasoning (KR).
- Andrienko N., Andrienko G., Artikis A., Mantenoglou P. and Rinzivillo S., Towards a Hybrid Human-Machine Discovery of Complex Movement Patterns.* In PKDD/ECML Workshops.
- 2022 *Mantenoglou P., Pitsikalis M. and Artikis A., Stream Reasoning with Cycles.* In 19th International Conference on Principles of Knowledge Representation and Reasoning (KR).
- Mantenoglou P., Pitsikalis M. and Artikis A., Towards Stream Reasoning with Deadlines.* In 38th International Conference on Logic Programming (ICLP), Technical Communications.
- 2021 *Mantenoglou P., Pitsikalis M. and Artikis A., Towards Streams of Events with Temporally-Constrained Effects.* In 37th International Conference on Logic Programming (ICLP), Technical Communications.
- 2020 *Mantenoglou P., Artikis A. and Paliouras G., Online Probabilistic Interval-based Event Calculus.* In 24th European Conference on Artificial Intelligence (ECAI).

## Teaching

- 2025 | **Programming Fundamentals.** Örebro University.

## Teaching Assistant

- 2023 | **Logic Programming.** National & Kapodistrian University of Athens.
- 2022 | **Logic Programming.** National & Kapodistrian University of Athens.  
**Principles of Programming Languages.** National & Kapodistrian University of Athens.
- 2021 | **Logic Programming.** National & Kapodistrian University of Athens.

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|      | <b>Object-Oriented Programming.</b> National & Kapodistrian University of Athens. |
| 2020 | <b>Data Structures.</b> National & Kapodistrian University of Athens.             |

## Dissemination Activities

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| 2025 | <p><b>Making Sense of Streaming Data.</b> In 28th European Conference on Artificial Intelligence (ECAI). Tutorial by A. Artikis, P. Mantenoglou and M. Pitsikalis.</p> <p><b>Sequencing in the Run-Time Event Calculus.</b> In 28th European Conference on Artificial Intelligence (ECAI). Paper Presentation.</p> <p><b>Temporal Specification Optimisation for the Event Calculus.</b> In 39th Annual AAAI Conference on Artificial Intelligence (AAAI). Paper Presentation.</p>  |
| 2024 | <p><b>Can computers understand what is happening? An introduction to complex event recognition.</b> In 5th ACM Europe Summer School on Data Science. Course by A. Artikis &amp; P. Mantenoglou.</p> <p><b>Extending the Range of Temporal Specifications of the Run-Time Event Calculus.</b> In 31st International Symposium on Temporal Representation and Reasoning (TIME). Paper Presentation.</p>   |
| 2023 | <p><b>Stream Reasoning with the Run-Time Event Calculus.</b> In University of Oslo (UiO). Invited Talk.</p> <p><b>Probabilistic Interval-based Event Recognition.</b> In Norwegian Computing Center (NR). Invited Talk.</p> <p><b>Complex Event Recognition with Allen Relations.</b> In 20th International Conference on Principles of Knowledge Representation and Reasoning (KR). Paper Presentation.</p>  |
| 2022 | <p><b>Online Reasoning under Uncertainty with the Event Calculus.</b> In 9th Workshop on Probabilistic Logic Programming (PLP). Invited Talk by A. Artikis &amp; P. Mantenoglou.</p> <p><b>Stream Reasoning with Cycles.</b> In 19th International Conference on Principles of Knowledge Representation and Reasoning (KR). Paper Presentation.</p> <p><b>Towards Stream Reasoning with Deadlines.</b> In 38th International Conference on Logic Programming (ICLP). Paper Abstract Presentation.</p> <p><b>Optimisation Methods for Complex Event Recognition.</b> In 19th International Conference on Principles of Knowledge Representation and Reasoning (KR). Doctoral Consortium.</p> |
| 2021 | <p><b>Stream Reasoning with the Run-Time Event Calculus.</b> In Ludwig Maximilian University of Munich. Invited Talk by P. Mantenoglou &amp; A. Artikis.</p> <p><b>Towards Streams of Events with Temporally-Constrained Effects.</b> In 37th International Conference on Logic Programming (ICLP). Paper Abstract Presentation.</p>  |
| 2020 | <p><b>Online Probabilistic Interval-based Event Calculus.</b> In 24th European Conference on Artificial Intelligence (ECAI). Paper Presentation.</p> <p><b>Online Probabilistic Interval-based Event Calculus.</b> In 17th International Conference on Principles of Knowledge Representation and Reasoning (KR). Doctoral Consortium.</p>  |

## R&D Projects

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| 2023 -<br>2024 | <b>CREXDATA:</b> Critical Action Planning over Extreme-Scale Data.  |
| 2023           | <b>ENEXA:</b> Efficient Explainable Learning on Knowledge Graphs.   |
| 2019 -<br>2022 | <b>INFORE:</b> Interactive Extreme-Scale Analytics and Forecasting. |

## PC Participation

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| 2026 | <b>AAAI:</b> AAAI Conference on Artificial Intelligence.                                     |
| 2025 | <b>ECAI:</b> European Conference on Artificial Intelligence.                                 |
|      | <b>KR:</b> International Conference on Principles of Knowledge Representation and Reasoning. |
|      | <b>TIME:</b> International Symposium on Temporal Representation and Reasoning.               |

## Scholarships

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| 2022 -<br>2024 | <b>Hellenic Foundation for Research &amp; Innovation:</b> Scholarship for PhD Candidates. |
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## Software

I am maintaining the following software:

- ▷ **oPIEC:** an open-source implementation of the Event Calculus for reasoning over noisy data streams [🔗](#).
- ▷ **RTEC:** an open-source Event Calculus dialect optimised for data stream reasoning [🔗](#).
- ▷ **SimLP:** a similarity metric for logic programs [🔗](#).
- ▷ **LexiCon:** a benchmark for planning under temporal constraints in natural language [🔗](#).
- ▷ **LiftedTCORE:** a lifted compiler for PDDL qualitative state constraints [🔗](#).

## Languages

- ▷ **Greek:** Native Language.
- ▷ **English:** C2, Certificate of Proficiency in English, University of Cambridge.
- ▷ **French:** B2, Certificat Pratique de Langue Française, Université Paris-Sorbonne.

## Contact

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