# Stylianos Loukas Vasileiou

Department of Computer Science New Mexico State University Las Cruces, NM, 88003, USA v.stylianos@wustl.edu thestlucas.com

#### RESEARCH INTERESTS

Human-Aware AI: Explainable Decision-Making, Collaborative Decision-Making, User Modeling

Knowledge Representation & Reasoning: Formal Logic, Argumentation, Planning, Belief Revision

Other: Neuro-symbolic AI

#### **EDUCATION**

Ph.D. in Computer Science	SP' 2019 – SP' 2025
Washington University in St. Louis	St. Louis, USA
M.S. IN ARTIFICIAL INTELLIGENCE	FL' 2016 – FL' 2017
University of Southampton	Southampton, UK
M.S. IN APPLIED MATHEMATICS	FL' 2015 – FL' 2016
University of Glasgow	Glasgow, UK
B.S. IN STATISTICS AND ACTUARIAL—FINANCIAL MATHEMATICS University of the Aegean	FL' 2010 – FL' 2014 Samos, GR

#### PROFESSIONAL EXPERIENCE

NEW MEXICO STATE UNIVERSITY	2025 -
Assistant Professor, Department of Computer Science	Las Cruces, USA

### **PUBLICATIONS**

#### Preprints & Under Review

- [1] Ben Rachmut, **Stylianos Loukas Vasileiou**, Nimrod Meir Weinstein Yeoh, Roie Zivan, and William Yeoh. "Explainable Distributed Constraint Optimization Problems". In: *arXiv preprint arXiv:2502.14102.* 2025.
- [2] **Stylianos Loukas Vasileiou**, Maria Vanina Martineze, and William Yeoh. "How Do People Revise Inconsistent Beliefs? Towards a More Human-Aware Belief Revision". In: *arXiv preprint arXiv:2405.19238*. 2024.
- [3] **Stylianos Loukas Vasileiou**, Antonio Rago, Francesca Toni, William Yeoh, and Tran Cao Son. "A Methodology for Incompleteness-Tolerant and Modular Gradual Semantics for Argumentative Statement Graphs". In: arXiv preprint arXiv:2410.22209. 2024.
- [4] **Stylianos Loukas Vasileiou**, William Yeoh, Alessandro Previti, and Tran Cao Son. "On Generating Monolithic and Model Reconciling Explanations in Probabilistic Scenarios". In: arXiv preprint arXiv:2405.19229. 2024.
- [5] Yinxu Tang, **Stylianos Loukas Vasileiou**, William Yeoh, Alberto Pozanco, and Daniel Borrajo. "A Proactive-Reactive Framework for Fairness-Aware Lifelong Meeting Scheduling". In: 2024.
- [6] Silvia Tulli, Stylianos Loukas Vasileiou, Mohamed Chetouani, and Sarath Sreedharan. "Inferring Implicit Goals Across Differing Task Models". In: arXiv preprint arXiv:2501.17704. 2024.

#### **Journal Articles**

[1] **Stylianos Loukas Vasileiou**, William Yeoh, Tran Cao Son, Ashwin Kumar, Michael Cashmore, and Daniele Magazzeni. "A Logic-based Explanation Generation Framework for Classical and Hybrid Planning Problems". In: *Journal of Artificial Intelligence Research (JAIR)* (2022).

# **Conference Papers**

- [1] **Stylianos Loukas Vasileiou** and William Yeoh. "TRACE-cs: A Synergistic Approach to Explainable Course Scheduling Using LLMs and Logic". In: *AAAI Conference on Artificial Intelligence (Demo Track)*. 2025.
- [2] Yinxu Tang, **Stylianos Loukas Vasileiou**, and William Yeoh. "Does Your AI Agent Get You? A Personalizable Framework for Approximating Human Models from Argumentation-based Dialogue Traces". In: *AAAI Conference on Artificial Intelligence*. 2025.
- [3] Stylianos Loukas Vasileiou, Ashwin Kumar, William Yeoh, Tran Cao Son, and Francesca Toni. "Dialectical Reconciliation via Structured Argumentative Dialogues". In: Proceedings of the International Conference on Principles of Knowledge Representation and Reasoning. 2024, pp. 777–787.
- [4] **Stylianos Loukas Vasileiou**, Xu Borong, and William Yeoh. "A Logic-based Framework for Explainable Agent Scheduling Problems". In: *European Conference on Artificial Intelligence (ECAI)*. 2023.
- [5] **Stylianos Loukas Vasileiou** and William Yeoh. "PLEASE: Generating Personalized Explanations in Human-Aware Planning". In: *European Conference on Artificial Intelligence (ECAI)*. 2023.
- [6] Ashwin Kumar, Stylianos Loukas Vasileiou, Melanie Bancilhon, Alvitta Ottley, and William Yeoh. "VizXP: A Visualization Framework for Conveying Explanations to Users in Model Reconciliation Problems". In: International Conference on Automated Planning and Scheduling (ICAPS). 2022.
- [7] Stylianos Loukas Vasileiou, Alessandro Previti, and William Yeoh. "On Exploiting Hitting Sets For Model Reconciliation". In: AAAI Conference on Artificial Intelligence. 2021.
- [8] Son Tran Cao, Van Nguyen, **Stylianos Loukas Vasileiou**, and William Yeoh. "Model Reconciliation in Logic Programs". In: *European Conference on Logics in AI (JELIA)*. 2021.
- [9] Van Nguyen, **Stylianos Loukas Vasileiou**, Son Tran Cao, and William Yeoh. "Conditional Updates of Answer Set Programming and Its Application in Explainable Planning (Extended Abstract)". In: *International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*. 2020.
- [10] Van Nguyen, **Stylianos Loukas Vasileiou**, Son Tran Cao, and William Yeoh. "Explainable Planning Using Answer Set Programming". In: *International Conference on Principles of Knowledge Representation and Reasoning (KR)*. 2020.
- [11] Son Tran Cao, Van Nguyen, **Stylianos Loukas Vasileiou**, and William Yeoh. "Conditional Updates of Logic Programs and its Applications (Poster Presentation)". In: *International Conference on Principles of Knowledge Representation and Reasoning (KR)*. 2020.

#### Workshop & Symposium Papers

- [1] Yinxu Tang, **Stylianos Loukas Vasileiou**, and William Yeoh. "Approximating Human Mental Models During Argumentation-based Dialogues". In: *ICAPS Workshop on Human-aware and Explainable Planning*.
- [2] Silvia Tulli, **Stylianos Loukas Vasileiou**, and Sarath Sreedharan. "Human-Modeling in Sequential Decision-Making: An Analysis through the Lens of Human-Aware AI". In: *ICAPS Workshop on Human-aware and Explainable Planning*. 2024.
- [3] Andrew Estornell, **Stylianos Loukas Vasileiou**, William Yeoh, and Daniel Borrajo. "Predicting Customer Goals in Financial Institution Services: A Data-Driven LSTM Approach". In: *International Conference on Automated Planning and Scheduling (ICAPS) Workshop on Financial Planning*. 2023.
- [4] Stylianos Loukas Vasileiou. "Towards a Logical Account for Human-Aware Explanation Generation in Model Reconciliation Problems". In: International Conference on Autonomous Agents and Multiagent Systems (AAMAS) Doctoral Consortium. 2023.
- [5] Stylianos Loukas Vasileiou, Ashwin Kumar, William Yeoh, Son Tran Cao, and Francesca Toni. "DR-HAI: Argumentation-based Dialectical Reconciliation in Human-AI Interactions". In: International Joint Conference on Artificial Intelligence (IJCAI) Workshop on Explainable AI. 2023.
- [6] **Stylianos Loukas Vasileiou**, Ashwin Kumar, and William Yeoh. "On Generating Personalized Explanations via Knowledge Forgetting". In: *International Joint Conference on Artificial Intelligence (IJCAI) Workshop on XAI*. 2022.
- [7] **Stylianos Loukas Vasileiou**, William Yeoh, Son Tran Cao, and Alessandro Previti. "Explanations as Model Reconciliation via Probabilistic Logical Reasoning". In: *International Conference on Principles of Knowledge Representation and Reasoning (KR) Workshop on Explainable Logic.* 2021.
- [8] Stylianos Loukas Vasileiou, William Yeoh, and Tran Cao Son. "On the Relationship Between KR Approaches for Explainable Planning". In: International Conference on Automated Planning and Scheduling (ICAPS) Workshop on XAIP. 2020.

[9] **Stylianos Loukas Vasileiou**, Son Tran Cao, and William Yeoh. "A Preliminary Logic-based Approach for Explanation Generation". In: *International Conference on Automated Planning and Scheduling (ICAPS) Workshop on Explainable AI Planning*. 2019.

#### **ADVISING**

# M.S. Students

• Yuxiao Wang
Project title: Generating Natural Language Explanations for Explainable Planning
University: Washington University in St. Louis

 $\mathrm{SP'}20-\mathrm{FL'}20$ 

• Ruoyao Yang Project title: Visualizations in Explainable Planning University: Washington University in St. Louis

## **B.S. Students**

• Benjamin Watkins, Project title: Proactive Rescheduling with Fairness Guarantees University: Washington University in St. Louis SP'23 - SU'24

FL'23 - SP'23

SP'23 - FL'23

Bob Xiao
 Project title: Goal Prediction in Financial Settings
 University: Washington University in St. Louis

• Tanish Agarwal, SU'22

Project title: Fairness-aware Scheduling University: IIT-Delhi (REU)

 $\bullet$  Borong Xu  $$\operatorname{FL'22}-\operatorname{SP'23}$$ 

Project title: Explainable Agent Scheduling Problems University: Washington University in St. Louis

# **TEACHING**

Washington University in St. Louis

- CSE 412A/511A: Introduction to Artificial Intelligence

FL'21, SP'22

# **SERVICE**

# Workshop Organizing Committee

- International Joint Conference on Artificial Intelligence (IJCAI) Workshop on Explainable AI (XAI) 2025
- International Conference on Automated Planning and Scheduling (ICAPS) Workshop on Human-Aware and Explainable Planning (HAXP) 2021 –

#### Program Committee/Reviewer

• Association for the Advancement of Artificial Intelligence (AAAI) 2024 –

• European Conference on Artificial Intelligence (ECAI) 2023

• International Joint Conference on Artificial Intelligence (IJCAI) 2023 –

• International Conference on Autonomous Agents and Multiagent Systems (AAMAS) 2020, 2023 –

• International Conference on Automated Planning and Scheduling (ICAPS) 2022, 2024 –

• Artificial Intelligence Journal (AIJ) 2023 –

• IJCAI Workshop on Explainable AI (XAI) 2023 –

• ECAI Workshop on Trustworthy Sequential Decision-making and Pptimization (TSDO) 2024

• ICAPS Workshop on Explainable AI Planning (XAIP)

2020

# **EVENTS & ACTIVITIES**

• Dagstuhl Seminar on Explainable AI for Sequential Decision-Making Sept 2024

- We Belong CS@WashU: Talk on Introduction to AI Jan 2020, Sept 2021

• We Belong CS@WashU: Member of the organization team Jan 2020

• Parkway North High School, Saint Louis, MO: Workshop on Introduction to AI Nov 2019