

Inês Lobo

PH.D. STUDENT, COMPUTER SCIENCE AND ENGINEERING · GAIPS, INESC-ID, IST

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About

Inês Lobo is a Ph.D. student in the AI for People and Society Research Group at INESC-ID, Instituto Superior Técnico, Lisbon, Portugal. She has a master's degree in Information Systems and Computer Engineering, specializing in Games and Intelligent Systems. She is currently conducting research in the areas of social intelligent agents, human-agent interaction, video games, and social sciences. Her most recent published work has focused on the incorporation of concepts related with social identities and practices into virtual agents and agent-based social simulations. She has also been researching the potential of using video games as a tool to explore socially appropriate behaviour and human-AI partnership.

Education

Instituto Superior Técnico

Ph.D. in Information Systems and Computer Engineering

Lisbon, Portugal

Sept 2021 - now

- Supervisor: Prof. Rui Prada
- Research topic: Using Agent-based Participatory Scenarios to Create Socially Aware Agents

Instituto Superior Técnico

M.Sc. in Information Systems and Computer Engineering

Lisbon, Portugal

Sept 2018 - Jan 2021

- Specialized in Games and Intelligent Systems
- Supervisor: Prof. Rui Prada
- Thesis title: Studying Responses to Norm Violations Using Computer Games

Instituto Superior Técnico

B.Sc. in Information Systems and Computer Engineering

Lisbon, Portugal

Sept 2015 - Jun 2018

Research Experience

Center for Applied Autonomous Sensor Systems (AASS)

Visiting Researcher

Örebro, Sweden

Apr 2023

- HumanE AI Network Project - European Network of Human-Centered Artificial Intelligence

Instituto de Engenharia de Sistemas e Computadores - Investigação e Desenvolvimento (INESC-ID)

Junior Researcher

Lisbon, Portugal

Feb 2021 - now

- HumanE AI Network Project - European Network of Human-Centered Artificial Intelligence
- The Geometry Friends Game AI Competition

Teaching Experience

Instituto Superior Técnico

Teaching Assistant

Lisbon, Portugal

Sep 2022 - now

- M.Sc. Course: Game Development Methodology (2023)
- M.Sc. Course: Autonomous Agents and Multi-Agent Systems (2022)

Work Experience

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Digital Marketing Engineer

Lisbon, Portugal

Sept 2019 - Dec 2020

- Collaborated with design and account teams to create responsive websites and e-mail marketing campaigns.

Research Projects

HumanE AI Network Project

H2020-ICT-2019-3 - 952026

Feb 2021 - now

- This is an EU-funded project that aims to develop robust, trustworthy AI systems that can understand humans, adapt to complex environments, and interact appropriately in complex social settings. My involvement includes the contribution to three micro-projects:
 - Socially Aware Interactions:** Incorporating social theories in a conversational agent using a flexible, robust, and easy-to-author approach.
 - Norm Analysis using Dictator Game Data:** Analysing Dictator Game datasets to identify patterns of norm-adhering behaviour given different game contexts.
 - Human-AI Collaboration Study with game:** Studying the differences in human perception and preferences concerning agents with varying collaboration strategies using the Geometry Friends game.

The Geometry Friends Game AI Competition

INESC-ID

Mar 2022 - Aug 2022

- This competition aims to develop agents that play the Geometry Friends game, a 2D collaborative physics-based game. I have made several contributions during my time organising the competition:
 - Designing the competition levels and launching it online.
 - Developing Python bridge to allow submissions of agents in Python instead of C#.
 - Creating promotional content for the competition.

Skills and Languages

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|-----------------------------------|--|
| Programming Languages | C#, C++, C, CSS, HTML5, Java, JavaScript, PHP, Python, SQL |
| Programming Environments | Visual Studio, Eclipse, Jupyter |
| Statistical Analysis Tools | Excel, Jasp, SPSS |
| Game Engines | GameMaker Studio, Unity |
| Productivity Tools | Trello, Notion |
| Miscellaneous | Git, \LaTeX , Canva, Wordpress, Twine |
| Languages | English (Proficient), Portuguese (Native) |

Honors and Awards

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| Dec 2021 | PhD Research Grant Awarded by the Foundation for Science and Technology (FCT) - 2021.04796.BD | Lisbon, Portugal |
| Nov 2021 | Best Paper Nominee Nominated for the CONVERSATIONS workshop | Virtual Event |
| Feb 2021 | Research Grant Awarded by Instituto Superior Técnico in the HumanE AI Network Project (Socially Aware Interactions) | Lisbon, Portugal |

Publications

JOURNAL ARTICLES

When “I” Becomes “We”: Modelling Dynamic Identity on Autonomous Agents
Joana Dimas, **Inês Lobo**, Samuel Mascarenhas, Diogo Rato, Rui Prada
Journal of Artificial Societies and Social Simulation (In Press). In Press

CONFERENCE/WORKSHOP PROCEEDINGS

Socially Aware Interactions: From Dialogue Trees to Natural Language Dialogue Systems
Inês Lobo, Diogo Rato, Rui Prada, Frank Dignum
Chatbot Research and Design: 5th International Workshop, CONVERSATIONS 2021, Virtual Event, November 23–24, 2021, Revised Selected Papers, Best Paper Nominee, 2022. Springer. URL: https://doi.org/10.1007/978-3-030-94890-0_8

THESES

Studying Responses to Norm Violations Using Computer Games
Inês Lobo
Master's Thesis (2021). Instituto Superior Técnico, Lisbon, Portugal, 2021. URL: <https://fenix.tecnico.ulisboa.pt/cursos/meic-t/dissertacao/846778572212667>

Presentations

EXTENDED ABSTRACTS/POSTERS

A Human-AI Collaboration Study using the Geometry Friends Game
Inês Lobo, Inês Batina, Jennifer Renoux, Janin Koch, Rui Prada
HumanE AI conference, Conference on AI for Humanity and Society, Oral Presentation, 2022, Stockholm, Sweden

Using Dictator Game Data to Identify Patterns of Behaviour and Beliefs on Norms

Inês Lobo, Diogo Rato, Rui Prada, Giulia Andrighetto, Eugenia Polizzi

HumanE AI conference, Conference on AI for Humanity and Society, Poster Presentation, 2022, Stockholm, Sweden

Socially Aware Interactions: From Dialogue Trees to Natural Language Dialogue Systems

Inês Lobo, Diogo Rato, Rui Prada, Frank Dignum

HumanE AI conference, Conference on AI for Humanity and Society, Oral Presentation, 2022, Stockholm, Sweden

Science Outreach

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| Jun 2022 - now | Member of GAIPS Social Media Team Responsible for maintaining GAIPS social media platforms, and organizing internal and public social events | <i>Lisbon, Portugal</i> |
| April 2022, 2023 | Community Outreach for INESC-ID International Girls in ICT Day | <i>Lisbon, Portugal</i> |
| Nov 2021, 2022 | Community Outreach for Games Lab Instituto Superior Técnico (Taguspark) Open Day | <i>Lisbon, Portugal</i> |

Professional Development and Volunteering

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| Aug 2022 | Student Volunteer EPIA Conference on Artificial Intelligence | <i>Lisbon, Portugal</i> |
| Jul 2022 | Competition Organizer Geometry Friends Cooperative Game AI Competition in the International Joint Conference on Artificial Intelligence (IJCAI-ECAI) | <i>Vienna, Austria</i> |
| Jan 2022 | Author Workshop Participant Social Identity in Agent-Based Models (SIAM) Special Issue | <i>Virtual Event</i> |
| Oct 2021 | Summer School Student The advanced course on AI (ACAI) on Human-Centered AI | <i>Berlin, Germany</i> |
| July 2021 | Summer School Student International Summer School on Artificial Intelligence and Games | <i>Virtual Event</i> |