## Inês Lobo

Ph.D. Student, Computer Science and Engineering · GAIPS, INESC-ID, IST

#### 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

Lisbon, Portugal

Ph.D. in Information Systems and Computer Engineering

Sept 2021 - now

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

#### **Instituto Superior Técnico**

Lisbon, Portugal

M.Sc. in Information Systems and Computer Engineering

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**

Lisbon, Portugal

B.Sc. in Information Systems and Computer Engineering

Sept 2015 - Jun 2018

## Research Experience \_\_\_\_\_

#### **Center for Applied Autonomous Sensor Systems (AASS)**

Örebro, Sweden

Visiting Researcher

Apr 2023

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

Lisbon, Portugal

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

Junior Researcher

**Teaching Assistant** 

Feb 2021 - now

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

## Teaching Experience \_\_\_\_\_

#### **Instituto Superior Técnico**

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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Lisbon, Portugal Sept 2019 - Dec 2020

Digital Marketing Engineer

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

## Research Projects \_\_\_\_\_

May 7, 2023

#### **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-Al 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 \_

**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, ŁTĘX, Canva, Wordpress, Twine Languages English (Proficient), Portuguese (Native)

### **Honors and Awards**

Dec 2021	<b>PhD Research Grant</b> 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	<b>Research Grant</b> Awarded by Instituto Superior Técnico in the HumanE AI Network Project (Socially	Lisbon, Portugal
160 2021	Aware Interactions)	Lisbon, Fortugui

### **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 Nom-inee**, 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

May 7, 2023

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

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

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

## Science Outreach \_\_\_\_\_

Jun 2022 - now	Member of GAIPS Social Media Team	Lisbon, Portugal
April 2022, 2023	Community Outreach for INESC-ID International Girls in ICT Day	Lisbon, Portugal
Nov 2021, 2022	Community Outreach for Games Lab Instituto Superior Técnico (Taguspark) Open Day	Lisbon, Portugal

## Professional Development and Volunteering \_\_\_\_\_

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

May 7, 2023 3