Elias **Fernández Domingos**

PhD

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Google Scholar: 373 citations; h-index 11; https://scholar.google.es/citations?user=Zb43U4IAAAAJ&hl=en
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1. Education

2020 — **PhD (Doctor of Science)**
Vrije Universiteit Brussel (VUB) & Universidade de Vigo, Spain
Joint PhD in Sciences (VUB) and Information and Communication Technologies (Universidade de Vigo). Thesis: *Coordinating Human and Agent Behaviour in Collective Risk Scenarios*. Awarded the "cum laude" mention (Spanish doctoral evaluation system).

2015 — **MSc / Engineering degree (5 years, pre-Bologna)**
University of Vigo, Spain
Telecommunications Engineering degree (double specialisation in Telematics Engineering and Electronics). Equivalence: first 3 years correspond to a Bachelor's degree, last 2 to a Master's degree (post-Bologna). Master's thesis: development of a conversational bot for the Moodle platform (maximum grade – MH 100%).

2. Academic positions

Oct 2024 – Present — **Senior Postdoctoral Researcher (FWO)**
Artificial Intelligence Laboratory, Department of Computer Science, Vrije Universiteit Brussel (VUB), Brussels, Belgium

Oct 2021 – Sep 2024 — **Postdoctoral Researcher (FNRS Chargé de Recherches)**
Machine Learning Group, Department of Computer Science, Université Libre de Bruxelles (ULB), Brussels, Belgium

2017 – 2020 — **FWO SB PhD Research Fellow**
Artificial Intelligence Laboratory, VUB, Brussels, Belgium

3. Selected publications

3.1 Peer-reviewed journal articles

2025 — Terrucha, I.; **Fernández Domingos, E.**; Suchon, R.; Santos, F. C.; Simoens, P.; Lenaerts, T. Humans program artificial delegates to accurately solve collective-risk dilemmas but lack precision. Proceedings of the National Academy of Sciences, 122(25), e2319942121.

2023 — **Fernández Domingos, E.**; Santos, F. C.; Lenaerts, T. EGTtools: evolutionary game dynamics in Python. iScience, 26(4).

2022 — **Fernández Domingos, E.**; Suchon, R.; Terrucha, I.; Grujić, J.; Burguillo, J. C.; Santos, F. C.; Lenaerts, T. Delegation to artificial agents fosters prosocial behaviours in the collective risk dilemma. Scientific Reports, 12(1), 8492.

2021 — **Fernández Domingos, E.**; Grujić, J.; Burguillo, J. C.; Santos, F. C.; Lenaerts, T. Modelling behavioural experiments on uncertainty and cooperation with population-based reinforcement learning. Simulation Modelling Practice and Theory, 109, 102299.

2020 — **Fernández Domingos, E.**; Grujić, J.; Burguillo, J. C.; Kirchsteiger, G.; Santos, F. C.; Lenaerts, T. Timing uncertainty in collective risk dilemmas encourages group reciprocation and polarisation. iScience, 23, 101752.

3.2 Peer-reviewed conference and workshop proceedings

2017 **Fernández Domingos, E.**; Burguillo, J. C.; Lenaerts, T. Reactive versus anticipative decision making in a novel gift-giving game. AAAI 2017, p. 4399–4405.

4. Research visits and international stays

3 – 7 Aug 2026 **Human Understanding of Machines and Algorithms (HUAM), University of Duisburg-Essen (Germany)**
with Prof. Nils Köbis

2 – 20 Mar 2026 **University of Lisbon (Portugal)**
with Prof. Jorge Pacheco

2 Jun – 11 Jul 2025 **Anthropo-Lab, Université Catholique de Lille (France)**
with Rémi Suchon and Vincent Lenglin
Experimental project on collective risk.

Apr 2025 **Shizuoka University (Japan)**
with Prof. Genki Ichinose
Finalised the first set of experiments on the joint project.

Aug – Sep 2024 **University of Lisbon (Portugal)**
with Prof. Jorge Pacheco
Work on computationally efficient EGT models and the study later published as “A new electoral bottom-up model of institutional governance” (Scientific Reports, 2025).

5. Awards

- **Senior Post-doctoral grant** 2024 — Fonds Wetenschappelijk Onderzoek (F.W.O.), 3 years (01/10/2024).
- **Best Poster Award** 2021 — Center for Applied AI, Chicago Booth University, Workshop on AI for Behavior Change at AAAI-21. Poster: “Delegation to autonomous agents promotes cooperation in collective-risk dilemmas.”
- **PhD awarded with highest distinction** 2020 — Joint PhD in Sciences and Information and Communication Technologies (“cum laude”).

6. Selected talks and lectures

- Delegation to autonomous agents promotes cooperation in collective-risk dilemmas. Research Seminars of the Center for Human-Compatible Artificial Intelligence, UC Berkeley 2021
- Delegation to AI in a collective Risk Dilemma. Max Planck Institute for Evolutionary Biology 2024
- Delegation to AI Agents. AI Bootcamp organised by the Cooperative AI Foundation at the SIOE Conference 2024