PREDOCTORAL FELLOWSHIP/ CONTRACT FPI

Esade Business School of Ramon Llull University offers a **predoctoral fellowship** as part of the State Plan for Scientific and Technological Research and Innovation of the Ministry for Science Innovation and Universities of the Spanish Government **to undertake a PhD thesis** in the framework of the funded project: **"Artificial Intelligence, Digital Environments, Polarization, and Echo Chambers". Project reference: PID2023-150757-NB-I00.**

Summary of the project:

AI is beginning to live up to its promises to deliver enormous benefits to users, from medical applications to boosting productivity, and amplifying human creativity. At the same time, experts, journalists, and politicians alike warn of potential risks involved in developing and employing AI. Relevant stakeholders include not only individual users (e.g., in their roles as consumers, patients, citizens, etc.) and the private as well as public organizations that deploy AI, but also regulators who are being called upon to impose constraints on the development and use of AI.

Much is being written about the potential societal risks of AI, from spreading misinformation to manipulating user perceptions, attitudes, and behavior, and from military applications going rogue to General AI developing its own objectives in wresting control from humans. The autonomous nature of AI and inability to perfectly align advanced systems with human values and context also introduces new risks ranging from privacy violations to embedded biases that could constrain human equality and dignity. Over and beyond societal risks the use of AI creates possible welfare and psychological consequences for individual users such as consumers, patients, workers, etc. AI may reduce complex human experiences and identities into simplified representations, formulas, or data points. This can lead to numerous issues including objectification, lack of self-actualization, and loss of privacy.

At the same time a key advancement of AI-systems is their ability to offer new ways of personalization for individual users leading to important changes in digital environments. The ability to personally tailor content and experiences offers many opportunities for companies and can create high levels of engagement among individuals. However, at the same time personalization mostly via ranking algorithms has raised concerns regarding its potential contribution to the growing opinion polarization among individuals, particularly those active on social media platforms. An important driving force of polarization in digital environments is the formation of online echo chambers fueled by algorithms. That is, social media platforms use these algorithms to tailor content to consumers' preferences, showing users information that aligns with their existing views and beliefs creating those so-called echo chambers or filter bubbles.

This project aims to deepen our understanding of the intricate interplay between AI's benefits and challenges in digital environments, specifically focusing on how echo chambers and opinion polarization emerge through social media interactions. Our research builds on a comprehensive conceptual framework and five interconnected sub-projects to provide insights for consumers, marketers, digital platforms, and policymakers, helping them better navigate the complexities of the digital consumer landscape.

The sub-projects are:

- Sub-project 1: AI's Dissemination Across Contexts and Cultures
- Sub-project 2: Formation of Digital Echo Chambers
- Sub-project 3: Polarization Across Cultures
- Sub-project 4: Mitigation of Polarization
- Sub-project 5: Policy Implications and Ethical Considerations

Tasks:

Among other tasks the project will involve:

- Literature reviews.
- Survey design.
- Use of Python to work with scraped data & data cleaning.
- Data analysis.

Profile requirements:

- Applicants must have a Master's degree from an accredited university in the area of business, marketing, management or engineering.

- Applicants should have at least 25 ECTS in areas of methodology and topics related to business management. Preference might be given to candidates possessing a Master of Research degree or previous experience as research assistants in tasks such as data collection, data analysis and writing results.

- Applicants' research interests are expected to be aligned with those of the project.

- Prior experience with experimental design, survey development, and data scraping will be valued.

- Knowledge of R and Python is a plus.

- Admission to ESADE's doctoral program will require shortlisted candidates to perform the ESADE Qualifying Exam, covering epistemology, research tools, organization and management theory. At the time of admission candidates are to fulfill all admissibility criteria (among others GMAT/GRE; proven proficiency in English)

Conditions:

Duration: maximum 4 years

Salary (subject to changes):

Year 1: € 19,097.36

Year 2: € 23,871.70

Year 3: € 23,871.70

Year 4: € 23,871.70

Expenses derived from research stays and enrollment in doctoral studies are also covered.

Selection process:

If you are interested in doing a doctoral thesis and are motivated for this research, send your detailed curriculum vitae and academic record along with a motivation letter and two recommendation letters to: research@esade.edu

A board of two researchers will review all applications, and the three best-ranked applicants will be selected for an interview (to be conducted online). The ranking of each applicant will follow the point system shown below, as mandated by the fellowship rules stated by the Ministry for Science and Innovation:

Criterion 1

Research-based and scientific trajectory (up to 50 points)

1a. Scientific-technical contributions (up to 45 points)

1b. Mobility and internationalization (up to 5 points)

Criterion 2

Suitability of the candidate to the research activities to be developed (up to 50 points)

Application deadline: 15th March 2025, at 14h CET.