CCC Computing Community Consortium

I am writing to express my interest in participating in person in the upcoming *"Grand Challenges for the Convergence of Computational and Citizen Science Research"* workshop from April 8 to 9, 2025, in Washington, DC. I am enthusiastic about the opportunity to contribute to discussions on how human-computer collaboration can address global challenges, particularly through the integration of Responsible Artificial Intelligence (RAI) and citizen science.

I am a Senior Researcher on RAI at Pompeu Fabra University. I have served as a Senior Advisor for UN Women, the Inter-American Development Bank (IDB), and the Organization of American States (OAS). My work focuses on the social impact and ethical aspects of artificial intelligence (AI), cybersecurity with a gender perspective, and diversity and inclusion in technologies. I was a Postdoctoral Researcher at the Barcelona Supercomputing Center (BSC) in AI, health, and disinformation, and a Visiting Researcher at Columbia University (2016) and Stanford University (2022). I have also worked in the private sector for Prime Research International in Germany for companies such as MasterCard, BASF, and General Motors. I hold a Ph.D. and a Master's degree in Sociology from the University of Barcelona (Cum Laude) and am an Analyst in Marketing from the Universidad de la Empresa (UDE) Uruguay. I am an Ambassador for Women in Data Science at Stanford Barcelona, a member of the Organization for Women in Science for the Developing World (OWSD), the <A+> Alliance for Inclusive Algorithms, and the founder of UyRedes, a network of Uruguayan professionals in business and academia worldwide. Recently, I was appointed to the UNESCO-WEAI Women for Ethical AI platform.

Extended Abstract

Artificial intelligence holds the promise of revolutionizing various aspects of our daily lives. From healthcare and education to environmental sustainability, AI can transform decision-making and provide valuable insights across industries. However, this potential can only be realized if we adequately address the risks associated with AI, including biases, privacy concerns, and ethical dilemmas. Responsible AI (RAI) moves beyond to provide a framework for aligning AI development with governance, social participation, and citizen social computing. These factors introduce multidimensional solutions and require both theoretical and empirical knowledge. AI governance must consider not only technical aspects but also the societal impact, addressing how AI interacts with and sometimes perpetuates existing inequalities. Practical, scalable solutions that are inclusive of marginalized communities must be prioritized if we are to make meaningful progress.

Education and Social Participation:

A critical aspect of RAI is education, which must be designed with an intersectional lens. This means addressing the diverse experiences and needs of different groups, particularly those in the Global South who are often excluded from the digital revolution. AI education programs must account for the barriers that marginalized communities, such as low-income groups, women, ethnic minorities, individuals with disabilities, etc. face in accessing the

technology and resources necessary for AI literacy. Without an intentional focus on closing these gaps, the digital divide will continue to grow, further exacerbating existing inequalities.

Efforts to integrate RAI principles into policy are gaining momentum globally. International and regional organizations, including UNESCO, the OECD, and the IDB, are playing a crucial role in shaping AI policies that respect human rights and ethical principles. However, much remains to be done in democratizing access to scientific advancements in AI. We must ensure that these technologies benefit everyone, regardless of their background or geographic location. Article 22 of the Universal Declaration of Human Rights asserts that all people have the right to benefit from scientific advancements, but this ideal is often left behind as scientific knowledge becomes increasingly specialized. While advancements in fields such as personalized medicine and big data analytics have been remarkable, they have also widened the gap between science and broader societal needs. Bridging this divide requires democratizing knowledge and ensuring that scientific progress is both accessible and understandable for all.

Citizen Science and Social Computing:

Citizen science offers an opportunity to make scientific processes more inclusive by involving non-experts in data collection, analysis, and interpretation. By broadening participation, we ensure that AI development incorporates diverse perspectives, which in turn fosters greater transparency and trust between the public and the scientific community. AI can enhance citizen science by automating routine tasks and offering actionable insights based on large, complex datasets. This convergence of computational power and human creativity can tackle major global challenges, from climate change to public health crises. To realize this potential, we need to build the necessary infrastructure to support citizen science initiatives. This includes affordable sensors for data collection, accessible platforms for collaboration, and measures to safeguard data privacy and security.

Ethical and Social Implications:

As AI becomes integrated into citizen science, ethical questions surrounding data privacy, consent, and accountability must be carefully addressed. These are complex issues that demand thoughtful consideration, particularly as non-experts may not be aware of potential biases in their data collection methods. AI must be implemented in ways that do not exacerbate existing biases or inequalities. This requires vigilance and a commitment to developing ethical frameworks that guide the integration of AI into citizen science responsibly.

Throughout my career, I have worked at the intersection of technology and society, focusing on the ethical implications of AI. Since 2005, my research has explored the social, educational, economic, and labor impacts of emerging technologies. I have collaborated with bioinformaticians on personalized medicine and with computer scientists on disinformation, hate speech, and gender biases in AI. These experiences have underscored the importance of adopting a multidisciplinary approach to AI development, ensuring that both technical and social considerations are equally valued. I am eager to contribute to these discussions at the upcoming workshop and explore how human-computer collaboration can help solve some of the most pressing challenges of our time.

Thank you for considering my application. I look forward to the possibility of contributing to this important conversation.