

Information and Networking Event Horizon Europe 2023-2024 Calls Co-Funded by the Government of India (DST)



## HORIZON-CL4-2024-HUMAN-03-02: Explainable and Robust AI

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## **AI fairness**

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## Project proposal title- Sociotechnical approach for evaluating AI fairness

- Project description- evaluating the fairness criteria, developing taxonomy, devising fairness mitigation techniques
- Why socio-technical approach?
  - Algorithms are socio-technical construction- The data used for developing algorithms are human constructed data that inherently exhibit the existing power relations. Hence, they need to be managed as social construction. Similarly, the operations involved in data transformation and modeling for the algorithm and practices of the data scientists involved in developing the algorithms are rooted in the socio-technical world (John-Mathews et al., 2023).
  - Need to strike a balance between Fairness and predictive performance of the algorithm
  - For a system to be stable, the technical output must align with the fair outcome as expected by the society
  - E.g. balance predictive accuracy and fairness/ privacy/ data sensitivity

- Current consortium- exploring to form the team
- Profile of the partners sought- Information systems, computer science, existing technology or AI centre at the university (but not mandatory)

## My research profile

- 1. A sociotechnical perspective for explicit unfairness mitigation techniques for algorithm fairness
- 2. Information Privacy: From an Individual Concern to a Collective Concern
- 3. WONK: Keeping the edge in the era of artificial intelligence,
- 4. Human Centred and Design Thinking Approaches for Predictive Analytics
- Developing Public Participation Models for the Communication of Sustainable Development Goals on Social Media
- 6. Framework of Goal-driven Risk Management in Software Development Projects Using Socio-technical Systems Approach
- 7. Cloud Crime and Fraud: A Study of Challenges for Cloud Security and Forensic