Posting Date: Sept. 8, 2020

Division of the Vice-President, Research and Innovation, and Strategic Initiatives
The Schwartz Reisman Institute for Technology and Society
University of Toronto

JOB POSTING – POSTDOCTORAL FELLOW

Area of Research: Computational Modeling and Analysis. Behavioral Economics.

Description of duties:
We aim to support a highly promising scholar with a background in a computational discipline, such as economics, computational social science, or computer science, with experience and interest in the phenomenon of human normativity: the practice of classifying actions or states as acceptable or not and coordinating enforcement schemes to channel behaviour according to that classification. The scholar's research agenda should address a topic that engages with the phenomenon of normativity as a system-level feature of human groups and focus on questions such as what attributes contribute to the maintenance of stability and adaptability and in support of cooperation and coordination to generate group value. The proposed research is expected to yield both theoretical and empirical publications.

This role is expected to contribute to a research program headed by Gillian K. Hadfield at the Schwartz Reisman Institute focused on building computational models of norm emergence and dynamics, rooted ultimately as closely as possible in a rational agent and equilibrium approach to decisions about third-party norm enforcement and compliance. This approach builds on a conceptual framework for normative social orders developed in Hadfield and Weingast (2012, 2014), Hadfield-Menell, Andrus, and Hadfield (2019) and Koster, Hadfield-Menell, Hadfield, and Leibo (2019). Modeling techniques could include evolutionary game theory, multi-agent models using POMDPs, and multi-agent reinforcement learning. Key questions explored in this program are: how do groups of agents settle (equilibrate) on normative classification for novel behaviours? What features of norm systems contribute to stability/robustness and adaptability? The Hadfield-Weingast work, for example, argues that conventional “rule of law” features such as generality and openness contribute to securing an equilibrium that relies on third-party unofficial enforcement of shared normative classification; the Hadfield-Menell and Hadfield et al. work looks at the role of “silly” (meaningless) rules in stabilizing a normative social order with important rules. Familiarity with formal modeling of norms and evolutionary approaches to norms (e.g. McElreath, Boyd and Richerson 2003, Boyd, Gintis and Bowles 2010, DeScioli and Kurzban 2012) as well as behavioral economics is a key asset.

The fellow will be an integral part of the research community at the Schwartz Reisman Institute. The Institute is dedicated to integrative research and human-centred solutions to make sure technology improves life—for everyone. We draw on world-class expertise across universities, government, industry, and community organizations to conduct ground-breaking research and develop innovative solutions to pressing real-world challenges.

Salary: $75,000 per annum.

Required qualifications: PhD (computational discipline, such as economics, computational social science, or computer science) or equivalent terminal degree, normally awarded within the past 5 years.

Application instructions: All individuals interested in this position must submit the following documents:

- ✓ A current curriculum vitae;
- ✓ A research proposal (not to exceed 1,500 words). Please supply an indicative title for the project at the beginning of the proposal;
- ✓ A representative manuscript or publication;
- ✓ Contact information for three referees, who will be asked to comment specifically on your qualifications for the proposed research project. Referees will be contacted directly by email with instructions for submitting letters of reference.

Complete applications to be submitted to: g.hadfield@utoronto.ca with copy to miyo.yamashita@utoronto.ca

Closing date: Applications will be accepted on a rolling basis, until filled.

Supervisor: Professor Gillian K. Hadfield

Expected start date: Negotiable

Term: 1 year with potential for renewal

FTE: 100%. To limit the spread of COVID-19, the University expects as many people as possible to continue working remotely until further notice. For all the latest information, please see the University's Coronavirus page. Please take the time to review , our Frequently Asked Questions (FAQs), the HR & Equity COVID-19 website, and the Research COVID-19 FAQs.

The normal hours of work are 40 hours per week for a full-time postdoctoral fellow (pro-rated for those holding a partial appointment) recognizing that the needs of the employee's research and training and the needs of the supervisor's research program may require flexibility in the performance of the employee's duties and hours of work.

Employment as a Postdoctoral Fellow at the University of Toronto is covered by the terms of the CUPE 3902 Unit 5 Collective Agreement.

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The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.