

Call for Papers

The FairWare'22 International Workshop on Equitable Data and Technology brings together academic researchers, industry researchers, and practitioners interested in exploring ways to build fairer, more equitable, data-driven software.

Co-located with ICSE'22, the FairWare'22 meeting will include keynotes on software fairness form different perspectives. FairWare'22 will also host panel sessions to invite researchers and the audience to engage in discussion.

We are accepting papers (4–7 pages), with either with novel research results or a statement of vision or position.

Since many issues associated with fairness are often sociological in nature, we welcome commentaries from *outside of computer science* that can shed light on the complex issue of fairness.

Background

There are too many recent examples where software has been implicated in the perpetuation of social injustice. For example, facial recognition software used by police historically, and still today, mimic the inequities in the criminal justice system. Healthcare software contributes to disparities in access and treatment. Online search engines perpetuate societal stereotypes. Ecommerce uses (and contributes to) differences in treatment and expectations of economic classes.

Society now demands that its software be fairer and more equitable. Governments, companies and professional societies such as the European Union, Microsoft, and the IEEE have white papers discussing requirements for fair and ethical software. While these documents differ in the details, they all agree that ethical software should must be "FAT"; i.e. fair, accountable and transparent and include:

- Integration with human agency;
- Accountability where conclusions are challenged;
- Transparency of how conclusions are made;
- Oversight on what must change to fix bad conclusions;
- Inclusiveness such that no specific segment of society is especially and unnecessarily privileged or discriminated against by the actions of the system.

These are all worthy goals. But how do we achieve them?

Topics of Interest

We seek papers that:

- Explore problems of equity in data- driven software
- Propose & critique ways to improving inclusiveness;
- Define tools and techniques for supporting the development of data-driven solutions
- Enumerate challenges that need to be addressed to improve data-driven software development.

We stress that the challenges raised by unfair and inequitable software may be algorithmic and/or socio-technical in nature. Socio-technical challenges include (a) how to determine the trade-off between making fair(er) systems and other objectives of

a system? and (b) how do we build equitable software given the inherently unfair social pressures behind it? Algorithmic challenges include, but are not limited to (c) how to identify bias in AI models? (d) how to explain the source or reason for this bias? (e) how to measure the level of bias in systems? (f) how to mitigate the effect of this bias by changing how models are trained? (g) how to provide support for explanation of automated decisions and redress for stakeholders and other mechanisms for accountability and transparency of deployed systems?

Journal Special Issue

Following on from the workshop, there will be an open call for a special journal issue on fair and equitable data and technology. In that special issue, reviewers from this workshop will review extended versions of the FairWare'22 papers.

Submitting to FairWare'22

Papers will be submitted to HotCrp. Submissions must comply with the ACM formatting guidelines (http://www.acm.org/publications/proceedings-template), not exceed the 7-page limit, be written in English, present an original contribution, and not be published or under review elsewhere. Two members of the program committee will review each paper and the committee will select the papers for presentation at workshop based on quality, relevance, and the potential for starting meaningful and productive conversations.

At least one author of each accepted paper must register for the workshop.

Important Dates

Submission: 14 January

Notification of acceptance: 25 February Camera-ready submission: 18 March Workshop date: Before 2X May

Workshop Organizers

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Workshop Program Committee

TRD

For more information

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