# Invitation to Participate in the Symposium on Foundations of Responsible Computing

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The Symposium on the Foundations of Responsible Computing (FORC), a conference that will be in its second year in 2021, invites participation from the SIGecom community. FORC 2021 will have both an archival publication option, and also the option to submit papers to a non-archival track that welcomes papers that are in submission or have recently appeared at other archival conferences. In particular, papers that appeared at EC 2020 or will be submitted to EC 2021 are welcome in the FORC 2021 non-archival track.

Categories and Subject Descriptors: []: —

General Terms: Theory; Algorithms; Economics; Security; Legal aspects
Additional Key Words and Phrases: Theory of Computation; Privacy, Algorithmic Fairness; Algorithmic Game Theory; Societal Concerns

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## 1. INTRODUCTION

The Symposium on Foundations of Responsible Computing (FORC), founded in 2020, is a forum for mathematically rigorous research in computation and society writ large. The Symposium aims to catalyze the formation of a community supportive of the application of theoretical computer science, statistics, economics and other relevant analytical fields to problems of pressing and anticipated societal concern.

As the Program Chair for FORC 2021, I am writing to the SIGecom community to tell you a bit about this new conference and to encourage you to submit your work to FORC. In particular, I see great opportunities for synergy between the EC conference and FORC.

Topics that fall in scope for FORC include, but are not restricted to, formal approaches to privacy, including differential privacy; theoretical approaches to fairness in machine learning, including the investigation of definitions, algorithms and lower bounds, tradeoffs, and economic incentives; computational and mathematical social choice (including apportionment and redistricting); theoretical foundations of sustainability; mechanism design for social good; mathematical approaches to bridging computer science, law and ethics; and theory related to modeling and mitigating the spread of epidemics. The Program Committee also warmly welcomes mathematically rigorous work on societal problems that have not traditionally received attention in the theoretical computer science literature. The common thread here is mathematical foundations. The math need not be complicated or "hard," but the aesthetic of the conference is one that values formal mathematical modeling and rigorous proof.

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FORC 2020 was a great success (see the list of papers on the FORC website here: `https://responsiblecomputing.org/forc-2020-program/`). Going forward, the conference aims to continue and build a tradition of attracting excellent papers, and also to serve as a central gathering place for researchers interested in the conference's themes. Historically, the community of researchers doing this work has not had a "home" conference—some of the work was suited to STOC/FOCS/SODA and similar outlets; work with a machine learning flavor has tended to go to machine learning conferences; some privacy work has appeared in cryptography conferences; EC has been a home for some of the economics-oriented work; and the new FAccT conference has emerged as a home for some of the work on fairness. The intention of FORC is not to compete with these other venues, but rather to provide a new home for work that previously struggled to "fit" elsewhere—because its emphasis on theory was under-appreciated, because its strong conceptual message was under-valued, or because its motivation in societal problems didn't fit the mold— and simultaneously an opportunity for researchers sharing these common interests to come together and be exposed to new work and exciting problems.

To this end, FORC 2020 invites submissions to two different tracks. Authors must indicate at the time of submission whether they are submitting to the archival-option track or the non-archival track.

—For submissions to the non-archival track, it is permitted to submit papers that have appeared in a peer-reviewed conference or journal since the last FORC. It is also permitted to simultaneously or subsequently submit substantially similar work to another conference or to a journal. Accepted papers in the non-archival track will receive talks at the symposium and will appear as one-page abstracts on the symposium website. They will not appear in the proceedings.

—For submissions to the archival-option track, papers that are substantially similar to papers that have been previously published, accepted for publication, or submitted in parallel to other peer-reviewed conferences with proceedings may not be submitted. Also, submissions that are substantially similar to papers that are already published in a journal at the time of submission may not be submitted to the archival-option track. Accepted papers in the archival-option track will receive talks at the symposium. Authors of papers accepted to the archival-option track will be given the option to choose whether to convert to a one-page abstract (which will not appear in the proceedings) or publish a 10-page version of their paper in the proceedings. The proceedings of FORC 2021 will be published by LIPIcs.

In particular, this means that papers that appeared at EC 2020 or will be submitted to EC 2021 are welcome in the FORC 2021 non-archival track. Also, note the permissive take on dual submission to journals, even for the archival-option track; this could be a nice opportunity to showcase work that is destined for an operations research or economics journal. The full CFP for FORC 2021 is here: `https://responsiblecomputing.org/forc-2021-call-for-papers/`.

I very much hope to see your work in submission, and you in attendance, at FORC 2021.