

## Crowd Science: Research on IT-Mediated Crowds

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### Abstract

*IT-mediated crowds are being implemented by organizations for multifarious purposes, using multifarious techniques. With this minitrack we seek to coalesce and support an enduring community of researchers focused on the study of the IT-mediated crowds. Our aim is to harness and focus the very broad inter-disciplinary study of IT-mediated crowds that currently exists, to incite a sharing of results, and a cross-pollination of ideas among researchers currently investigating IT-mediated crowds from IS, ISchool, HCI, Computer Science, Marketing, Education, Natural Sciences, Communication, and Technology Innovation perspectives. In this brief introduction, we define the scope of the Crowd Science minitrack while illustrating numerous useful subjects for future research.*

### Introduction

In the purview of this mini-track, IT-mediated crowd phenomena can be found in these areas of research; Crowdsourcing [11-14, 18, 64], Crowd Finance (Crowdfunding, Blockchains, Distributed Ledgers) [8, 21, 50], Prediction Markets [6, 23], Citizen Science [17, 71], Open Innovation & Tournament platforms [5, 9, 15, 16, 27, 53], Social Media for resource creation [30-32], Wikis &

Wikipedia [39, 40, 72, 75], Big Data from Crowds [3], Spatial Crowdsourcing (Sharing/Gig Economy) [57], Situated/IoT Crowdsourcing [57], Wearables Crowdsourcing [57], IT-mediated Collective Intelligence [37, 42, 57]

We encourage new empirical and theoretical submissions from social, economic, technical and organizational scholars, investigating these phenomena in a variety of contexts, including: Health Care [49, 52], law [74], Education [4, 19, 22, 38, 47, 48, 54, 62], Governance & Policy [2, 14, 35, 43, 44, 45, 61, 70], Smart Cities & GIS, Entrepreneurship, User Innovation [68, 69], Institutional and Strategic perspectives, and International Business and Development perspectives [10].

Topics of interest for the minitrack include:

- Human computation, micro-tasking and virtual labour markets [26, 46, 67].
- Crowdsourced contests, their design and efficacy [9, 15, 16, 27].
- Gamification in IT-mediated crowds [29, 51, 65, 66].

- IT-mediated crowds and law/intellectual property [74].
- IT-mediated crowds for invention and commercialization [1, 7, 9, 16, 27, 33, 34, 41].
- Business models of IT-mediated crowd companies and startups.
- The economics of IT-mediated crowds.
- The knowledge dynamics of IT-mediated crowds [24, 25, 77].
- IT-mediated crowds and 3D printing.
- Wearables & Sensors in, and as crowds [57].
- IT-mediated crowds and machine learning [28, 36].
- The role of Bots/AI in IT-mediated crowds.
- Measuring IT-mediated crowds and outcomes [16, 27, 56, 60, 63,76].
- Formal models and computational models/simulations [20].
- IT-mediated crowd platforms/intermediaries [7, 26].
- IT-mediated crowds & common-pool resources.
- Varieties of Crowd Capital [58-60, 64]
- IT-mediated crowds and Industry/competitive dynamics.

- Crowd-Member/IT/Organization dynamics [20].
- Crowd Labor movements and labor dynamics.
- Expert, non-expert, and mixed crowds [20, 61].

As track co-chairs, we endeavor to coalesce a set of compelling talks, provide developmental paper reviews, and special issues stemming from the track, focused on one or more of the areas mentioned here.

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