

CALL FOR PAPERS

Special Issue: Crowd in Intelligent Systems

ACM Transactions on Intelligent Systems and Technology



AIMS AND SCOPE

Crowdsourcing has become a common strategy to resolve problems that are difficult to computers. It has proven the intelligence, wisdom, or judgments from the crowd, when appropriately combined, can be effective in addressing challenges in various areas, from knowledge organisation (such as Wikipedia), business investment, policy making, government transparency to scientific development. In particular, the contributions from the crowd are stretching out the horizon of intelligent systems by filling the gap between artificial intelligence and human intelligence with the wisdom of crowd. Successful applications can readily be seen in the fields of computer–human interaction, computer vision, information retrieval, social computing, bio-medical research, and information and multimedia systems.

The uses in crowdsourcing have opened up many new forms of intelligent systems and technologies most of which have barely been explored to date. However, challenging research questions still lie in the way to unleash the potentials of the crowd as a part of intelligent systems. This special issue aims to address these challenges in the hope of overcoming the obstacles blocking the road toward intelligent systems where artificial– and human–intelligence perfectly harmonise.

TOPIC DIMENSIONS

- **General:** Theoretical, experimental, and/or methodological developments advancing state-of-the-art knowledge of crowdsourcing for intelligent systems
- **Novel Applications:** Novel uses of contributions from the crowd for intelligent systems
- **Evaluation:** Evaluation of the design and quality of intelligent systems by the crowd
- **Machine Learning:** Effective learning and information aggregation from noisy crowd inputs; quality assurance and cheat detection for the crowd contributions
- **Human Factors:** Effective interfaces and workflow for the task workers, especially for complicated, compound tasks
- **Infrastructure:** Programming languages, tools and platforms providing support for crowdsourcing; security, privacy, trust, and reputation management in crowdsourcing for intelligent systems
- **Economics and Incentives:** Enable effective and efficient crowd contributions that traditionally would only be possible by expensive domain experts
- **Ethics:** Theory, design, or mechanisms that address ethical issues in adopting crowd's efforts in intelligent systems. Possible ethical issues include education, labor exploitation, crowd awareness (of the tasks they perform), and alienation.
- Inherent biases, limitations and trade-offs of combining crowd intelligence and artificial intelligence

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HOW TO SUBMIT

Please see the instructions for authors on the ACM TIST website (<http://tist.acm.org>).

TENTATIVE SCHEDULE

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