

Editorial

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Dear Reader,

Microtasking has been the bread and butter of human computation. The straightforward delegation of small, manageable tasks to crowd workers has made it possible to combine the efforts of many to tackle large datasets. Thanks to the Internet, this can be easily implemented at almost limitless scales. Due to the simplicity and repeatability of this method and the prevalence of crowdsourcing marketplaces and reusable citizen science platforms, it has been employed successfully to accelerate scientific and market research.

Today, however, we are witnessing the emergence of a more sophisticated, next generation of human computation that employs qualitatively new approaches. In this issue of *Human Computation*, we are presented with the notion of a “crowd actor”, that is, a human computation system that incorporates the inputs of many human contributors into a single collective agent that is always available to respond to requests in real time.

Inspired by natural human institutions, the Artificial Intelligence sub-field of Multi-Agent Systems employed “electronic institutions” as a framework for governing roles, workflows, and interactions among automated agents. Meaning and structure can be elusive in online social systems. Thus, the second article adapts this formalization to human agents in online social systems to help coordinate behaviors and extract patterns of interest.

The final article in this issue reinforces the research value of analyzing emergent human computation - the incidental information processing that results from humans interacting with online systems. This article examines the impact of social signals in peer recommendation, with results that will likely inform the design of future engineered systems.

With the introduction of tools and techniques such as those presented in this issue, we can expect the emergence of new classes of human computation systems and correspondingly novel applications. Perhaps 2016 will mark a Cambrian explosion in human computation.

Collectively yours,

Pietro Michelucci & Elena Simperl

Co-Editors-in-Chief

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