Augmenting Intelligence with Humans-in-the-Loop (HumL@IWSC2018)

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This volume contains the papers presented at HumL@ISWC2018, the second international workshop on Augmenting Intelligence with Humans-in-the-Loop held on October 9, 2018 in Monterey, CA in conjunction with the 17th International Semantic Web Conference (http://iswc2018.semanticweb.org/). Humans-in-the-loop is a model of interaction where a machine process and one or more humans have an iterative interaction. In this paradigm the user has the ability to heavily influence the outcome of the process by providing feedback to the system as well as the opportunity to grab different perspectives about the underlying domain and understand the step by step machine process leading to a certain outcome. Amongst the current major concerns in Artificial Intelligence research are being able to explain and understand the results as well as avoiding bias in the underlying data that might lead to unfair or unethical conclusions. Typically, computers are fast and accurate in processing vast amounts of data. People, however, are creative and bring in their perspectives and interpretation power. Bringing humans and machines together creates a natural symbiosis for accurate and unbiased interpretation of data at scale. The goal of this workshop is to bring together researchers and practitioners in various areas of AI and Semantic Web to explore new pathways of the humans-in-the-loop paradigm.

The workshop program covers diverse application domains and problems where humans-in-the-loop approaches have been studied. Example applications include language models for dictionary expansion, hiring decisions, knowledge graph curation, and active learning, which is a perfect example of humans-in-the-loop approaches that aim at optimally combining humans and algorithms together. Other aspects considered in our proceedings are the interaction of multiple humans when supporting algorithmic decision making and the selection of the right compensation level for humans involved in data annotation tasks.

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