Professor Giulio Jacucci, University of Helsinki

Intent Modelling as Interactive Machine Learning

Abstract:

The talk will provide an introduction to the interactive AI area by discussing interactive intent modelling, an approach developed by FCAI groups that can enable innovations in information retrieval by surpassing the prevailing query and response paradigm improving our productivity in information discovery. Interactive Intent Modelling provides computational models of intent that combine in a novel way computer and human agency. Machine learning techniques compute implicit and explicit user feedback balancing exploration and exploitation in information retrieval. A concrete application will be presented along with emerging results. Finally emerging implications and challenges in interactive AI will be discussed including understandability and levels and mechanisms of adaptation between human and computers.

Bio:

Giulio Jacucci, Professor at the Department of Computer Science (University of Helsinki). His area of research is human-computer interaction and intelligent user interfaces. He has previously been professor at the Department of Design Aalto University and has contributed to design methods also co-authoring Design Thinks a book by MIT Press. The research over the years contributed to mobile social media, pervasive public displays, multitouch and surface computing, and persuasive technologies. Recently his work has investigated new user interfaces to information retrieval systems introducing interactive intent modelling as a new approach in information discovery also published in the Communications of the ACM. Prof Jacucci has important experience in coordinating research directing research programmes at the Helsinki Institute for Information Technology HIIT, and coordinating international research projects (FP7 BeAware, 2009-2012 on persuasive computing and behaviour change, MindSee, 2013-2016 on Mind Computer interfaces for information seeking). He contributes to program committee of various HCI conferences has served as subcommittee chair at ACM CHI multiple times, and serves in the editorial board of the International Journal Human-Computer Studies. He is also a co-founder and has served as chairman of the board of MultiTaction Ltd. a leader in visual collaboration environments.

https://www.hiit.fi/ubiquitous-interaction