

COMPUTATIONAL MODELLING FOR COGNITION EXPANSION: MAKING THE INVISIBLE VISIBLE

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Artificial intelligence is reshaping our world and we assist at unpreceding acceleration rates in numerous human activities. The core goal is the expansion of the human cognition, from its internal expansion (cognitive psychology) to its external expansion (social cognition). Understanding the complexity of the human brain and replicating its functionalities has been the goal of many scientists, and today, more than any time in the scientific history, the researchers are working on a more ambitious step of amplification and augmentation of cognition capabilities. We looked at the deep mental process triggering the human behaviour and building our personal behavioural print. We translated and adapted core psychology theories of human cognition into computational models. A digitisation of the mental processes opens the door to building a better self for self-cognitive capacities expansion, and equally important, a better relational self for augmented social cognition. We were interested in our personalised cognitive behavioural print and how it impacts our cognitive expansion. We will present our computational modelling and how we are testing it in real world applications.

BIOGRAPHY

Alice Marascu is a Senior Research Scientist at Nokia Bell Labs. Previously, she was a Research Scientist at IBM Research-Ireland and held post-doctoral research roles at University of Trento-Italy, and INRIA Rennes Bretagne Atlantique-France. Her research spans natural language processing, large scale streaming data processing, large scale complex pattern recognition and mining, time series analysis. She has given multiple talks to industrial and academic audiences and published results in main conferences in the areas of big data, data mining, machine learning, query answering (VLDB, PVLDB, SIGMOD, Big Data Conference, etc.).

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