



Netherlands Enterprise Agency

The MIT Intelligence Quest

IA-Boston

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About the MIT Intelligence Quest

On February 1st 2018, Massachusetts Institute of Technology (MIT) started a new ambitious Institute aiming to approach artificial intelligence (AI) in a radically novel way. Named the MIT Intelligence Quest (MIT IQ), the Institute brings together hundreds of researches across different faculties of the university to start redesigning AI by using the root of intelligence itself: the human brain.¹ The purpose is twofold: to improve our understanding of the working of the brain, and to use this knowledge to replicate this in machines.

To approach these challenges, MIT IQ aspires to build machine intelligence that grows the way human intelligence develops from birth through infancy and childhood, and make it ‘learn like a child’.² It thereby concentrates on two questions: 1) how does human intelligence work, in engineering terms, and 2) how can we use that deep grasp of human intelligence to build wiser and more useful machines, to the benefit of society?

MIT IQ consists of two linked entities that both have a distinct role in the approach to these questions. First, *The Core*, which is reverse-engineering human intelligence to come to new insights. This body works on gaining fundamental understanding of how the human brain works, and uses this information to find a way to make a computer brain work similarly. It applies this knowledge in generating machine-learning algorithms for more specific applications. The second entity is called *The Bridge*. It improves access to AI and machine learning tools across various disciplines and faculties. It does so through applying the knowledge in natural and artificial intelligence The Core discovers to various disciplines. The MIT IQ brings together over 200 researchers from MIT, but also other research labs worldwide.³

Fundamental in the Institute’s culture is cross-discipline collaboration. This innovative way of looking at AI encourages life scientists, computer scientist, social scientists, and engineers to work together and focus on what they can learn from one another. After all, human intelligence

¹ <https://intelligencequest.mit.edu/#about>

² <https://intelligencequest.mit.edu/#about>

³ <https://www.ft.com/content/6a295184-0692-11e8-9650-9c0ad2d7c5b5>

is a product of many different variables coming together, which also signifies the challenging nature of its understanding and appliance in AI.

The Launch

On March 1st 2018, the MIT IQ was launched, which took place at the Kresge Auditorium on the MIT campus in Cambridge. A wide array of sessions took place, ranging from MIT faculty discussing their work across all aspects of The Core and The Bridge, to touching upon the societal challenges AI will face in the future. Notable speakers were Eric Smidt, Former CEO of Google and Executive Chairman of Alphabet, Sophie Vandeboek, Chief Operating Officer at IBM Research, and MIT's own president L. Rafael Reif.



At the MIT IQ Launch

MIT IQ's Role in the AI of the Future

A reoccurring theme throughout the MIT IQ Launch, and an important aspect to the Institute, is societal impacts AI will have in the future. Reif said AI to be 'a dominant source of new wealth and inequality', and believes that 'getting this right is among the most important challenges of our time'.⁴ Therefore, alongside the focus on cross-discipline collaboration, MIT aspires to partner with government and business leaders to secure the use of AI in a way that it will benefit society as a whole.⁵ It plans to raise hundreds of millions of dollars from both the private and public sector to make the MIT IQ's aspirations reality.

⁴ <http://www.zdnet.com/article/mit-launches-mit-iq-aims-to-spur-human-artificial-intelligence-breakthroughs-bolster-collaboration/>

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