



Universität Hamburg

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FAKULTÄT

FÜR MATHEMATIK, INFORMATIK  
UND NATURWISSENSCHAFTEN

TAMING THE MACHINES

# DOES ALPHA GO ACTUALLY PLAY GO? CONCERNING THE STATE SPACE OF AI

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ÖFFENTLICHE  
RING-  
VORLESUNG

## About the lecture

The goal of the talk is to develop and propose a general model of the state space of AI. Given the breathtaking progress in AI research and technologies in recent years, such conceptual work is of substantial theoretical interest. The present AI hype is mainly driven by the triumph of deep learning neural networks. As the distinguishing feature of such networks is the ability to self-learn, self-learning is identified as one important dimension of the AI state space. Another dimension is recognized as generalization, the possibility to go over from specific to more general types of problems. A third dimension is semantic grounding. Our overall analysis connects to a number of known foundational issues in the philosophy of mind and cognition: the blockhead objection, the Turing test, the symbol grounding problem, the Chinese room argument, and use theories of meaning. It shall finally be argued that the dimension of grounding decomposes into three sub-dimensions. And the dimension of self-learning turns out as only one of a whole range of “self-x-capacities” (based on ideas of organic computing) that span the self-x-subspace of the full AI state space.

ETHIK IN DER  
INFORMATIONSTECHNOLOGIE

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– delivered in digital form –

Details to access the lecture will be made public at <http://uhh.de/inf-eit> on a timely basis.

KONTAKT

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