

Thoughts about Machine Learning

Monday 29 January 2024 14:05 (1 hour)

I'll discuss past, present, future, and far future of machine learning and artificial intelligence.

Mini-bio. The New York Times headlined: "When A.I. Matures, It May Call Jürgen Schmidhuber 'Dad'." Since age 15, his main goal has been to build a self-improving A.I. smarter than himself, then retire. His lab's deep learning artificial neural networks based on ideas published in the "Annus Mirabilis" 1990-1991 have revolutionised machine learning and A.I. By 2017, they were on over 3 billion smartphones, and used billions of times per day, for Facebook's automatic translation, Google's speech recognition, Google Translate, Apple's Siri & QuickType, Amazon's Alexa, etc. He pioneered generative adversarial networks (1990, now widely used), artificial curiosity, Transformers with linearized self-attention (1991 - Transformers are the basis of the famous ChatGPT), and meta-learning machines that learn to learn (since 1987). Today, the most cited neural networks all build on work done in his labs. Elon Musk tweeted: "Schmidhuber invented everything." He is recipient of numerous awards, Director of the AI Initiative at KAUST in KSA, Scientific Director of the Swiss AI Lab IDSIA, Adj. Prof. of A.I. at Univ. Lugano, and Co-Founder & Chief Scientist of the company NNAISENSE. He is a frequent keynote speaker at major events, and advising various governments on A.I. strategies.

Would you like to be considered for an oral presentation?

Presenter: Prof. SCHMIDHUBER, Juergen (KAUST and IDSIA)

Session Classification: Keynotes ML Research