

连接认知科学与认知智能：新人工智能发展之路？

Linking Cognitive Science and Cognitive Intelligence: New Path to AI
development?

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Abstract: With the rapid development of AI, new technologies emerge every day. Yet, we also hit certain bottlenecks in AI development. Let's pause for a moment to see if the development of cognitive science would give some hints to the development of cognitive intelligence. The new discoveries in cognitive science would guide the direction of the research of cognitive intelligence. With large scale models, and large scale real data collected in the human cognitive process, we may be able to emulate more precisely the human cognitive process. "Start like a baby, learn like a kid" (Credit: Prof. Josh Tenenbaum, MIT) may be a viable path to AI development. Large scale generative pre-trained models (GPTs) and ChatGPT are probably just the start of a new era.

Bio: Dr. Shipeng Li is the Managing Director of SAIL Labs, a Chair Scientist of IDEA, and an Adjunct Professor of the Chinese University of Hong Kong, Shenzhen. He was the Chief Scientist and Executive President of Shenzhen Institute of Artificial Intelligence and Robotics for Society (AIRS), Corporate Vice President and Co-President of Research of iFLYTEK, and the CTO of Cogobuy Group. He was a founding member of Microsoft Research Asia (MSRA) and served as the Research Area Manager. Dr. Li was the EiC (2018-2019) of IEEE Transactions on Circuits and Systems for Video Technology. He is quite influential in multimedia, IoT and artificial intelligence areas, and holds 205 US patents and published 330+ papers with 26,526 citations (H-index: 84). He is named as one of the top 1,000 computer scientists in the world by Guide2Research. He has trained 4 MIT TR35 Innovator Award Winners. Dr. Li received B.S. and M.S. from USTC and Ph.D. from Lehigh University. He is a Standing Director for the Chinese

Institute of Electronics, the co-founder and Joint Secretary General of AI Industry Technology Innovation Strategic Alliance (AITISA) under China MOST. Dr. Li is an IEEE Fellow and an IEAS (International Eurasian Academy of Science) Academician.

摘要：人工智能发展迅猛，各种新技术日新月异，同时也出现一些瓶颈。让我们暂停一下步伐，看看认知科学的发展，对认知智能的发展有没有启示？认知科学的很多发现，可以在认知智能的研究中起到指导作用，以大规模的模型，以及大规模在人的认知过程中采集的真实数据，也许可以更准确地模拟人的认知过程。“像婴儿一样开始，像孩子一样学习”（MIT 教授 Josh Tenenbaum 的观点），也许是一条可行的新人工智能发展之路？大规模生成式预训练模型(GPTs)和 ChatGPT 可能仅仅是一个新的时代的开始。

简历：

李世鹏博士、IEEE Fellow、国际欧亚科学院院士：

李世鹏院士现任思尔实验室主任、香港中文大学（深圳）客座教授、IDEA 研究院讲席科学家。他曾任深圳市人工智能与机器人研究院（AIRS）首席科学家和执行院长、科大讯飞集团副总裁及讯飞研究院联席院长、科通集团首席技术官、微软亚洲研究院创始成员与副院长。李院士曾任《IEEE 电路与系统视频技术学报》总编辑(2018-2019)，在多媒体、物联网及人工智能等领域颇具影响力。他拥有 205 项美国专利并发表了 330 多篇被引用了 26,526 次的论文（H 指数：84）。他被 Guide2Research 列为世界顶尖 1000 名计算机科学家之一。他培养出四位 MIT TR35 创新奖的获得者。李院士拥有中国科学技术大学学士和硕士学位及 Lehigh 大学博士学位。他是中国电子学会常务理事、（科技部）新一代人工智能产业技术创新战略联盟（AITISA）发起人之一及联合秘书长。他是 IEEE Fellow 和国际欧亚科学院院士。

