ACM SIGAI CHINA:A New Incubator for AI in China

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ACM SIGAI CHINA

The China Chapter of ACM SIGAI committees have been preparing ACM SIGAI China for a year. In March 2016, Le Dong and the ACM China council decided to establish *a new chapter–ACM SIGAI China*.

In May 2016, the issue was further discussed in ACM China Council Meeting in Beijing. The Chair of ACM, Vicki L. Hanson, CEO, Robert B. Schnabel, and COO, Pat Ryan gave their approval to the foundation of ACM SIGAI China. The Chair of ACM China Council, Yunhao Liu from Tsinghua University and the Chair of ACM SIGAI, Sven Koening from University of California also gave their special support to the foundation of this new chapter in China. The issue was also reported to ACM and ACM China for permission. In October 2016, the organization structure of ACM SIGAI China was discussed in ACM China Council Meeting which was held in Taiyuan, China.

In March 2017, an official email from ACM informed that *ACM SIGAI China chapter was successfully registered* and *ACM SIGAI China was officially founded*. In this *new chapter, the Executive Chair & General Secretary is Le Dong* from University of Electronic Science and Technology of China.

In this year, ACM SIGAI China symposium aims to provide *a world's premier forum* of renowned researchers to share their insightful opinions and discuss cutting-edge research on the artificial intelligence. The symposium features in types of sessions including distinguished talks and panel discussion. This summit forum expects to promote the development of artificial intelligence from the *academic, technical to industry and applications*.

ACM TURC 2017 - SIGAI CHINA SYMPOSIUM

The ACM Turing 50th Celebration Conference - China (ACM TURC 2017), was held from May 12-14, 2017 in Shanghai, China with its key theme on "Trustworthy Network Big Data". The conference served as a highly selective and premier international forum on computer science research.

Figure 1: ACM TURC 2017

Alan Mathison Turing is the father of computer science, artificial intelligence, the founder of computer logic. He put forward the important concept of "Turing machine" and the "Turing test". In honor of this distinguished scientist, A.M. Turing Award is established according to his name in 1966 by the Association for Computing Machinery (ACM). It devotes to reward individuals who have made outstanding contributions to the computer industry. The Turing Award is recognized as the highest distinction in computer science and the Nobel Prize of computing.

On the occasion of the 50th anniversary of the establishment of A.M. Turing Award, ACM TURC 2017 was hosted by Shanghai Jiao Tong University, the Third Research Institute of the Ministry of Public Security, and Shanghai Municipal People's Government, co-organized by China Computer Federation, Tsinghua University, Peking University, Huazhong University of Science and Technology, and Tongji University.

In addition to the main sessions, the conference included **workshops, panels, demonstrations**, and **exhibits**. Twelve **distinguished speakers** including **A.M. Turing Award Recipient** were invited to discuss the frontier issues in today's society as well as the interdisciplinary development trends together.

ACM SIGAI is the Association for Computing Machinery's Special Interest Group on Artificial Intelligence. The Chair of ACM SIGAI is Sven Koening from University of California who is also AAAI Fellow and distinguished speaker of ACM.

This time, **ACM SIGAI China** invited many distinguished speakers to share their ideas with our members in the **symposium**. They were Yangsheng Xu (Chinese University of Hong Kong), Sven Koenig (University of Southern California), Shipeng Li (CTO of Cogobuy Group and IngDan), Shiyi Chen (Fudan University), Bill Huang (CloudMinds Inc.), Gansha Wu (Uisee Technology Inc.), Gang Pan (Zhejiang University), Shuicheng YAN (Chief Scientist of Qihoo/360, Director of 360 AI Institute), Heng Tao SHEN (University of Electronic Science and Technology of China), Chunyuan Liao (Hiscene), Kai Yu (Horizon Robotics), Liang Lin (SenseTime Group Limited and Sun Yat-Sen University), Enhong Chen (University of Science and Technology of China), Junping Du(Beijing University of Posts and Telecommunications), Zenglin Xu (University of Electronic Science and Technology of China), Fei Wu (Zhejiang University), Rui Hou (Chinese Academy of Sciences), Zhongxing XUE (KingPoint), Jinglei ZHAO (ReadSense), Xuyao Hao, and Pianpian He(TF Securities). Yidan XU (Founder & CEO of Topplus), Linsen BAI (Founder of Alpha Brick), Wenzhi LIU (Engineering Director of SenseTime),and Yao Chen (Marketing Manager of Horizon Robotics) also delivered their speech in the Technical Review part. **Our sponsors** and **enterprises** also joined in the symposium panel discussion: **From AI to Applications, what it takes to REALLY get there?**

In **conference panel**, Vinton Cerf, Alexander Wolf, Wen Gao, Kai-Fu Lee, Xiangyan Li and Andrew discussed **Big Data or Brain Powered Artificial Intelligence: Turing or Quantum?** John Hopcroft, Recipient of the ACM

Figure 2: Le Dong & Kai-Fu Lee @ TURC 2017

Turing Award talked about **Exciting ideas in computer science**. The ACM/IEEE Fellow, Gao Wen also brought up his ideas about **Evolution of the Artificial Visual System**.

In the banquet, Haifeng Wang, Vice President of Baidu discussed **AI Makes the Internet Smarter**. The Chairman and CEO of Sinovation Ventures, President of Sinovation Ventures Artificial Intelligence Institute and Science, Kai-Fu Lee also shared his ideas. Lee reviewed the history of computer and emphasized the application of quantum computer. He pointed out that today, people learn from mass data. **In the future, people are able to learn from experience and have the ability of transfer learning**.

From the discussion, we can know that with the progress of science, AI will be used in **cross-disciplinary programs** and natural language understanding which will eventually be platformed and become the most effective tool which can be applied in deep learning, transfer learning, reinforcement learning, statistical learning, and so on. AI will eventually step into and have a huge impact on the physical world and also make remarkable accomplishments. But we have to be aware of the limitations of artificial intelligence. It lacks self-awareness, aesthetic, feelings or love. At the same time, it demands mass data, single domain and top scientists. People must be aware of these obstacles and realize that a new opportunity beckons in China. Human select AI as nature selects the fittest.There are several approaches for scientists: start their own business, empower technology, find a partner and publish papers.
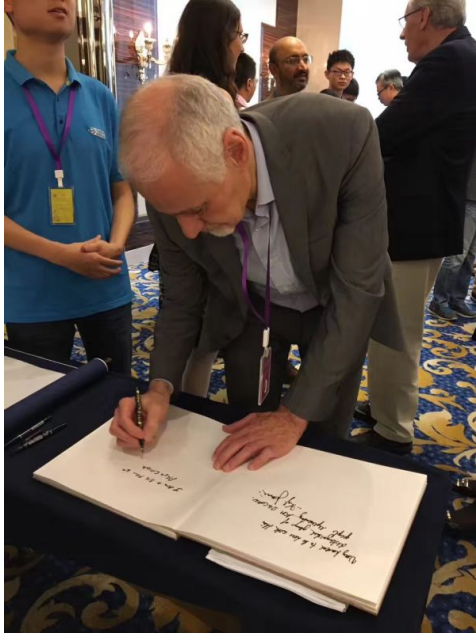
Figure 4: Le Dong, The Executive Chair&General Secretary of ACM SIGAI CHINA Was Awarded by Vicki L.Hanson in The ACM Turing 50th Celebration Conference - China

Figure 3: Alexander Wolf Left His Words in the Autograph Book @ TURC 2017

The Future of AI

In May 4th, 2014, President Xi Jinping once pointed out that China is going to *initiate world-class universities*.

In 2016, *Report on the Work of the Government* highlighted a new higher education policy, aiming to promote the construction of *"Double First-Rate"*(developing First-class Universities and Academic Programs) in China. The development of cutting-edge technology relies heavily on higher learning institutions.

In the banquet, scientists, entrepreneurs and students exchanged their thoughts and ideas freely and left their precious signatures and some words in our autograph book.

The feature of Turing Conference is AI. In *ACM SIGAI China Committee, Executive Chair* & *General Secretary is Le Dong* from University of Electronic Science and Technology of China. Vice General Secretary are Mingliang Xu from Zhengzhou University and Yanli Ji from University of Electronic Science and Technology of China. Vice chair are Kun Zhou from Zhejiang University, Kai Yu from Horizon Robotics, Gansha Wu from Uisee Technology Inc., and Liang Lin from Sensetime Tech. Man Yuan and Ji Wan are also ACM SIGAI China secretary. In ACM TURC 2017, other organizers, XueLong Li, Hanli Wang, and Xiang Bai also made their contributions to this event. In particular, *2017 Outstanding Contribution Award* and *Excellent ACM China Lecturer* was presented to *Le Dong* by ACM Turing 50TH Celebration Conference - China for her extraordinary contributions to ACM TURC 2017 by *Vicki Hanson, the Chair of ACM*.

In 2017, President Xi attended the Opening Ceremony of *Belt and Road* Forum for International Cooperation(BRF) and he pointed out that in order to pursue innovation-driven development, China should strengthen the cooperation on the digital economy, artificial intelligence, nanotechnology, and quantum computing, and advance the development of big data, cloud computing and smart cities so as to turn them into a digital silk road of the 21st century. He also said that we should spur the full integration of science and technology into industries and finance, improve the environment for innovation and pool resources for innovation. Artificial Intelligence orients the development of future technology.

In July, 2017, *the State Council* notified *the plan of the development for artificial intelligence* in the following decades in China.

In such context, **ACM SIGAI China** is founded with three major missions:

First, ACM SIGAI China provides an **incubator** for this emerging industry. It connects AI and education, also with other fields. **Academic faculty, student, enterprises** are very welcomed to join ACM SIGAI China to promote the interaction and impact of disciplinaries in AI.

Second, we encourage **original AI innovation** and **international cooperation** within communities via various activities and events, through different branches in ACM and SIGAI, especially in China.

Third, we strongly advocate the variability of SIGAI CHINA and especially welcome **students and females** to become members of ACM SIGAI China.

We shall strengthen the context from senior researchers to junior students, as well as link partners among different regional areas. The new era of artificial intelligence needs every one of you! Learn and exchange the sparks of thoughts here!

More information about conference, recent events, registration, business cooperation and further details can be found on our website and WeChat Official Account. Your participation is warmly welcomed!

Figure 5: AI Helps Innovation

Find your opportunities at

Our website:

http://china.acm.org/TURC/2017/SIGAI.html

WeChat Official Account QR Code:

Le Dong received her PhD degree in Electronic Engineering and Computer Science from Queen Mary, University of London in 2009. She is a full professor in University of Electronic Science and Technology of China. She is the coordinator of several National Natural Science Foundation Projects such as NSFC Surface Project, NSFC Youth Project, NSFC Important Research Project and so on. She has now published more than 40 papers in international journals and conferences including several top journals and high level International Conference, such as TIP, ACM MM, TMM, PR, TCSVT, ICPR. She has served as a reviewer for several top journals and conferences. Now she is the Executive Chair & General Secretary of ACM SIGAI China , General Secretary of Vision And Learning Seminar (VALSE), General Chair of ACM TURC 2017 SIGAI CHINA Symposium, General Secretary of National Program of Global Experts, Youth Talents Committee, and the Executive Secretary of next-generation of Sichuan Provincial Engineering Laboratory. She got the Best Talk Award in the 10th ACM International Workshop on IOT and Cloud Computing, Excellent ACM CHINA Lecturer and ACM 2017 Outstanding Contribution Award in ACM Turing 50th Celebration Conference - China.

Man Yuan is currently a postgraduate student studying Teaching English to Speakers of Other Languages in Moray House School of Education in the College of Humanities and Social Science at the University of Edinburgh, Scotland, United Kingdom. She received her Bachelor of Arts degree in English from Shanghai International Studies University, and Bachelor of Science in Management Accounting as her minor specialty from Shanghai University of International Business and Economics, China in 2017. She has served as secretary of ACM SIGAI China, and translator in Huaqiao Foundation. Her research interests include English for specific purposes, teaching English to engineering and science students, language testing, and second language acquisition.

Ji Wan is currently a postgraduate student majoring in Computer science and technology in Zhengzhou University. He received his Bachelor of Engineering degree in Computer science and technology from Zhengzhou University, China in 2015. He is the secretary of ACM SIGAI China. His research interests include mobile and spatial data management, location-based services , and smart city computing.

Ming-Liang Xu is a full professor in the School of Information Engineering of Zhengzhou University, China, and currently is the director of CI-ISR (Center for Interdisciplinary Information Science Research) and the Vice General Secretary of ACM SIGAI China. His research interests include computer graphics and artificial intelligence. He has now published more than 40 papers in international journals and conferences including ACM TOG, IEEE TPAMI, IEEE TIP, IEEE TCSVT. Xu got his Ph.D. degree in computer science and technology from the State Key Lab of CAD&CG at Zhejiang University.