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PERSONAL INFORMATION

Shen Yushi, male, was born in 1978 in Beijing. He holds a Bachelor's degree in Electrical Engineering from Tsinghua University, a Master's degree and a Doctorate in Electrical Computing from the Univ. of CA, San Diego, and a Master's degree in Business Administration from the Univ. of WA, USA.



Meanwhile, Shen Yushi, PhD, MBA, Professor, is a Chinese natural science researcher, a foreign academician of the National Academy of Sciences of Georgia, a special expert of the National "Thousand People Plan", a special expert of the Beijing "Huiju Project", a high-end talent leader of Zhongguancun Science Park, a pioneer of science and technology innovation in the 14th Five-Year Plan, an expert of the National "Thousand People Plan" and "Ten Thousand People Plan", a member of the "100 Chinese returnees in 40 years of China's reform and opening up", and a recipient of the "Special Contribution Award for Innovation and Entrepreneurship of Overseas Chinese" by the Beijing Municipal People's Government.

Dr Shen has more than 20 years of research, R&D and management experience in the field of networking and communications and has deep connections in cyberspace strategy, internationally renowned cloud computing, artificial intelligence, big data, network security, video codec and wireless communications, multinational corporations, international Chinese and technology communities, and related government, industry, academia and research sectors in China and the US. Dr Shen is one of the leading innovators and practitioners of a "non-Von Neumann network computing system"; He has also contributed to establishing the Microsoft Azure cloud platform and the International Cloud Security Alliance (CSA) in China.

Currently, Dr Shen is the founder, chairman and chief scientist of NovNet Computing System Tech Co.,Ltd. (NovNet), and the Intelligent Network Computing Laboratory director at Tsinghua University's Straits Research Institute. He worked at Microsoft headquarters from 2006 to 2015 as a senior software architect, chairman of the Microsoft Chinese Association, chairman of Microsoft Asia HR General Assembly, cloud strategy consultant of Microsoft Corporation, and director of cloud computing of Microsoft China. From 2016 to 2020, he worked at VNET Group, serving as Group Vice President, (Cloud) Chief Technology Officer, Strategic Cooperation Centre General Manager, and Senior Information Technology Advisor. He also served as Chief Strategy Officer of Tsinghua Unigroup Co. and the Chief Scientist of TUSHOLDINGS.

Part-time social responsibilities include General Secretary of China Cloud System Pioneer Strategic Alliance, Cloud Security Alliance (CSA) Vice President and Secretary General of Greater China Region, Co-founder of Microsoft for startups, Director Judge and Business Mentor, Member of the Information and Communication Economy Expert Committee of the Ministry of Industry and Information Technology, Member of the Cloud Computing Expert Committee of the Chinese Institute of Electronics, Member of the Expert Advisory Committee of the China Electronic

Chamber of Commerce, Distinguished Researcher of the China Smart City Development Research Center, Researcher of the Internet Industry Research Institute of Tsinghua University, Deputy Secretary General of the Youth Committee of the National Overseas Chinese Federation, Deputy Director of the Blockchain Laboratory of the Central University of Finance and Economics, Director of the Artificial Intelligence Education Laboratory of Shanghai Normal University, Advisor of the Capital Construction Investment Guidance Fund, Chairman of the TMT Investment Decision Committee, Investment Advisor of Intech Capital Management Co. He is also an advisor to the Microsoft Global Chinese Association, the Capital Construction Investment Fund, the Chairman of the TMT Investment Decision Committee, an investment advisor to Intech Capital Management and a part-time professor at Nanjing University of Posts and Telecommunications.

EDUCATIONAL BACKGROUND

1985-1997 Elementary to High School: Beijing Jingshan School;

1997-2001 Bachelor of Science, Electronic Engineering, Tsinghua University, China;

2001-2003 Master of Science in Electronic and Computer Engineering, University of California, San Diego, USA(UCSD, graduated with highest honours with a perfect GPA);

2003-2006 PhD in Electrical Computer Engineering, University of California, San Diego (UCSD, summa cum laude with perfect GPA), mentors: Pamela C. Cosman; Laurence B. Milstein;

2010-2012 Master of Business Administration, University of Washington (Univ. of WA), Mentor: Keskin Tayfun.

WORK EXPERIENCE

2001-2006 Research Associate, Department of Electronic Computing, University of California, San Diego (UCSD), USA, working on designing wireless and Internet systems based on cross-layer optimisation, Joint source-channel coding in multimedia

communications.

Summer 2005 Researcher in Communication Systems, Motorola Inc., USA, working on performance analysis and optimisation of 4th generation wireless communication system architectures and key technologies.

2004-2006 System design consultant at Entropic Communications Inc., working on designing and developing multimedia communications and distribution systems.

2006-2012 Senior Architect at Microsoft Inc. in Redmond, USA, responsible for integrated development and system integration of cloud computing, Windows video, multimedia and streaming media, co-founder and technical director of Microsoft's Multimedia R&D Center in India.

2013-2015 Cloud Strategy Consultant and Director of Microsoft Inc. in China, responsible for Microsoft cloud computing technology implementation and operation in China, business and government strategy expansion, and cloud ecosystem construction, one of the prominent responsible members for the medium and long-term development of Microsoft cloud system in Greater China, and one of the founders and judges of Microsoft for startups in China.

2016-2020 Worked at 21 VNET Group, serving as Group Vice President, (Cloud) Chief Technology Officer, Strategic Cooperation Centre General Manager, Senior Information Technology Advisor, Chief Strategy Officer of Tsinghua Unigroup Co. and the Chief Scientist of TUSHOLDINGS, responsible for the overall strategic planning of the Group with hybrid cloud and information infrastructure business as the core, as well as its technology architecture, R&D operation, business development, brand marketing, international cooperation, government affairs and industrial fund.

2020-present Founder, Chairman and Chief Scientist of NovNet, Director of

Intelligent Network Computing Laboratory, Tsinghua University Straits Research Institute, where he proposed the "non-von Neumann network computing system" core theory and its "ubiquitous intelligent applications in the fields of city-level big data and air-space-sea integration".

ACADEMIC WORK

Books:

1. 沈寓实, 金双根, 徐亭, 薄智泉, 徐贵宝, 《数字新基建: 开启数字经济新时代》, 电子工业出版社, 2022 年 7 月
2. 沈寓实, 徐亭, 李雨航, 《人工智能伦理与安全》, 清华大学出版社, ISBN 9787302596639, 2021 年 12 月
3. 汤兵勇, 徐亭, 沈寓实, 李雨航, 《云图·云途: 云计算技术演进与应用》, 机械工业出版社, ISBN 9787111686019, 2021 年 9 月
4. 沈寓实, 高汉中等, 《非冯诺依曼网络计算体系》, 清华大学出版社, ISBN 9787302567950, 2021 年 2 月
5. 刘荣, 沈寓实等, 《智能医学》, 人民卫生出版社, ISBN 9787117278010, 2020 年 8 月
6. 蒋立乾, 沈寓实, 《大数据、人工智能、区块链与数学应用研究》, 云南科技出版社, ISBN 9787558720956, 2019 年 5 月
7. 陈江, 沈寓实, 《造梦空间: 网络、金融与中国机遇》, 上海人民出版社, ISBN 9787208137752, 2016 年 5 月
8. 赵勇, 林辉, 沈寓实, 《大数据革命: 理论、模式与技术的创新》, 电子工业出版社, ISBN 9787121237652, 2014 年 6 月
9. 张亚勤, 沈寓实, 李雨航, 《云计算 360 度: 微软专家纵论产业变革 (第二版)》, 电子工业出版社, ISBN 9787121186868, 2014 年 2 月
10. Y. Shen, Y. Li, L. Wu, S. Liu, Q. Wen, "Enabling the New Era of Cloud Computing: Data Security, Transfer, and Management", IGI Global, ISBN 9781466648012, Nov. 2013.
11. 高汉中, 沈寓实, 《云时代的信息技术: 资源丰盛条件下的计算机和网络新世界》, 北京大学出版社, ISBN 9787301213384, 2013 年 1 月
12. 张亚勤, 沈寓实, 李雨航, 《云计算 360 度: 微软专家纵论产业变革》, 电子工业出版社, ISBN 9787121186868, 2013 年 1 月
13. Y. Shen, P. C. Cosman, L. B. Milstein, "Cross-Layer Design for Video

Communications", Lambert Academic Publishing (LAP), ISBN 9783838343617, Apr. 2010.

14. Y. Shen, "Image and Video Coding - Fundamentals, Standards and Perspectives", Lambert Academic Publishing (LAP), ISBN 9783838396255, Sept. 2010.

Journal articles

1. 沈寓实, 王瞳, 《元宇宙中的智慧城市安防体系建设》, 经济要参, 2022 年第 44 期, CN11-4686/F
2. Jinting Wang, Y. Shen, Zhongbin Wang, Strategic Joining and Social Optimality in Cognitive Radio Networks with Egalitarian Processor Sharing", IEEE Transactions on Cognitive Communications and Networking, Jul 2022.
3. Y. Shen, J. Zhang, Z. Ji, and L. Gao, "Intelligent Scheduling Strategies for Computing Power Resources in Heterogeneous Edge Networks", The Eighth International Conference of Pioneering Computer Scientists, Engineers and Educators, Apr 2022.
4. G. Ruan, T. Pan, C. Lu, Z. Luo, H. Wang, J. Zhang, Y. Shen, T. Huang, and Y. Liu, "Lightweight Route Flooding via Flooding Topology Pruning for LEO Satellite Networks", 2022 IEEE International Conference on Communications (ICC): SAC Satellite and Space Communications Track, May. 2022.
5. 任骏菲, 沈寓实, 耿德红, 《做好基层央行支付清算工作》, 中国信息界, 2020 年 2 月
6. 宋鹏程, 沈寓实, 李昂达, 《基于区块链技术的可信任设备及其在物联网中的应用》, China Science and technology information Sep.2018, 中国科技信息, 2018 年第 18 期, DOI : 10.3969/j.issn.1001- 8972.2018.18.037.
7. Y. Shen, K. Mehrotra, P. C. Cosman, and L. B. Milstein, "Delay Allocation between Source Buffering and Interleaving for Wireless Video", EURASIP Journal on Wireless Communications and Networking, Dec. 2016, DOI 10.1186/s13638-016-0703-4.
8. 胡泳, 沈寓实, 高汉中, 《中国实体制造业转型之路——从智能家居看虚实镜像系统》, 哈佛商业评论, 2015 年夏季达沃斯会刊, 2015 年 9 月
9. Y. Shen, J. Yang, T. Keskin, "The Evolution of IT towards Cloud Computing in China and U.S.", 2012 International Conference on Computational Problem-Solving (ICCP), Oct. 2012.
10. H. Gao, Y. Shen, "Border Adaptive Micro-Base-Station for the Wireless

Communications", 2012 International Conference on Computational Problem-Solving (ICCP), Oct. 2012.

11. Y. Li, Y. Shen, Y. Liu, "Utilizing Content Delivery Network in Cloud Computing", 2012 International Conference on Computational Problem-Solving (ICCP), Oct. 2012.

12. Y. Shen, T. Keskin, J. Yang, "The Impact of Cultural Differences on Cloud Computing Ecosystems in U.S. and China", Americas Conference on Information Systems (AMCIS), Seattle, WA, 2012.

13. Y. Shen, P. C. Cosman, L. B. Milstein, and E. F. Martinez, "On Uplink Channel Estimation in WiMAX Systems", International Journal of Mobile Computing and Multimedia Communications (JMCMC), pp.67-77, Apr.-Jun., 2010.

14. Y. Shen, P. C. Cosman, and L. B. Milstein, "Error Resilient Video Communications over CDMA Networks with a Bandwidth Constraint", IEEE Trans. on Image Processing, vol.15, no.11, pp.3241-3252, Nov. 2006.

15. Y. Shen, P. C. Cosman, and L. B. Milstein, "Video Coding with Fixed Length Packetization for a Tandem Channel", IEEE Trans. on Image Processing, vol.15, no.2, pp.273-288, Feb. 2006.

16. Y. Shen, P. C. Cosman, and L. B. Milstein, "Weight Distribution of a Class of Binary Linear Block Codes Formed from RCPC Codes", IEEE Commu. Letters, vol.9, no.9, pp.811-813, Sept. 2005.

17. Y. Shen, P. C. Cosman, and L. B. Milstein, "Video Coding for a Time Varying Tandem Channel with Feedback", Proceedings of the IEEE Data Compression Conference, pp.480, Snowbird, Utah, USA, Mar. 29-31, 2005.

18. Y. Shen, P. C. Cosman, and L. B. Milstein, "Video Communications with Optimal Intra/Inter-Mode Switching over Wireless Internet", Proceedings of the 37th Asilomar Conference on Signals, Systems and Computers, pp.1548-1552, Pacific Grove, California, USA, Nov. 9-12, 2003.