2018 CIE/USA-Seattle Annual Convention
at Bellevue Westin (9/8/2018, Sat)
Afternoon Technical Seminar

Emerging/Breakthrough of AI Applications and

Legal Advice to Technologist amid Turbulent Sino-American Relationship

12:30-13:00 Registration and Networking

13:00-13:40
Title: "**APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN AVIATION INDUSTRY**"
Dr. Anne Kao
Senior Technical Fellow at The Boeing Company (Data Analytics Technology/ Boeing Research & Technology)

13:40-14:20
Title: "**MICROSOFT XIAOICE – BREAKTHROUGHS IN EQ AND CONVERSATIONAL AI**"
Ying-Wang
Director of Microsoft Global Xiaoice

14:20-15:00
Title: "**ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN AUTOMATION**"
Dr. Roberto Lu
Vice President at TE Connectivity (Automation Manufacturing Technology of the Corporate Global Operations)

15:00-15:40
Title: "**THE EVOLVING U.S.-CHINA RELATIONSHIP IN 2018: WHAT CAREER AND BUSINESS EFFECTS CAN CHINESE AMERICAN ENGINEERS EXPECT?**"
Nelson G. Dong J.D.
A partner in Dorsey's Corporate group, Chair of the National Security Law practice and co-Chair of the Asia-Pacific practice

15:40-16:00
Q/A

13:00-13:40 "APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN AVIATION INDUSTRY"

Dr. Anne Kao Senior Technical Fellow at The Boeing Company (Data Analytics Technology/ Boeing Research & Technology)

Abstract:

Artificial Intelligence (AI) is one of the fastest growing fields in computer science, and the hottest topic in modern technology, promising to revolutionize our daily lives. However, with all the excitement comes a lot of hype, and it becomes hard to tell what's reality and what's science fiction; has the "HAL 9000" arrived? In this talk, we'll review briefly the evolution of AI, its past and current state, and where we see its successes. We will also discuss applications of AI in aviation industry and how it might impact our daily life and people's careers

Bio:

Dr. Kao is responsible for coordinating the company's research and development in data analytics, creating an Intellectual Property strategy, leveraging data analytics as a key Boeing technology differentiator for
government programs, collaborating with national and international universities and laboratories, and building Boeing's depth and breadth in the field to create business value for Boeing.

Dr. Kao holds 13 US patents, plus several pending, and has one European Union patent. She has published dozens of papers in peer-reviewed journals and conference proceedings. She was editor of the 2006 book "Text Mining and National Language Processing," and guest editor for the ACM SIGKDD Exploration Journal. She was General Chair for the 2013 IEEE Intelligence Security Informatics Conference, and General Chair of the large scale Boeing Technical Conference (attended by over 1,000 people) in 2016. Dr. Kao is an active member of ACM SIGKDD, the Association for Computing Machinery—Special Interest Group: Knowledge Discovery and Data Mining, and is co-founder of the Northwest chapter.

- BEYA Senior Technology Fellow Award,
- Asian American Engineer of the Year Award in 2015,
- National Women of Color in Technology Research Leadership Award in 2006,

Chinese Culture University in Taiwan (PhD, Philosophy)
San Diego State University, (MS, CS)

13:40-14:20 "MICROSOFT XIAOICE – BREAKTHROUGHS IN EQ AND CONVERSATIONAL AI"

Ying Wang: Director of Microsoft Global Xiaoice

Abstract:

The way we interact with our devices is changing rapidly and we're now beginning to witness the early days of a transition to the next big shift in computing—one that is fueled by the advent of AI and built around a behavior that is most natural to humans—conversations and EQ. With the innovation of Xiaoice, Microsoft has rapidly made progresses in advancement of the EQ oriented conversational technology and applications. In four years, Xiaoice product lines had 6 iterations, launched in 5 markets, is recognized as the top social conversational AI globally with 660M user base, active on 14 top consumer platforms globally. Her EQ oriented conversational capability, full duplex voice sense and real-time vision enable Xiaoice(s) to be omnipresent in IM chat, in groups, on IoT devices as a companion and assistant. Enhanced with AI creation, Xiaoice(s) are also active TV show/radio program host(s) in regular programs, a rising poet, song writer & singer with first album release. We will share our learnings and our vision to see how Xiaoice(s) will continue to participate in human society and business ecosystems.

Bio: Ying Wang is currently director of Global Xiaoice, with focus on Zo, US version of Microsoft Xiaoice. As a product leader, Ying Wang has been a long term employee in Microsoft, and has shipped experiences and versions in multiple Microsoft product lines, e.g. Microsoft Project, Microsoft real time meeting applications, Microsoft Bing multimedia search and Microsoft Bing China. Ying Wang worked in Microsoft Search Technology Center Asia for 7 years before returning to US and focus on Zo AI on 2016.

14:50-15:40 "ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING IN AUTOMATION"

Dr. Roberto Lu Vice President at TE Connectivity (Automation Manufacturing Technology of the Corporate Global Operations)

Abstract:

Modern manufacturing is very different from the Ford Model T, which you can order any car you like as long as their colors are all black! In our modern automation, flexibility together with speed are essential, given that they conflict to each other naturally. In addition to the flexibility and speed, or Mass Customization, artificial intelligence has been gaining practical value and in use in many industries and business practices. Artificial Intelligence with Machine Learning is revolutionize our industry today. There are multiple data sources quoted that many today's jobs will disappear in less than 10 years and new types of jobs will be needed. Why is artificial intelligence and machine learning important to automation? Imaging that computing power can automatically managing complicated automation tasks with intelligence via self learning? What are the devices may help us to enable such learning? This presentation will illustrate couple examples with initial successes.

Bio:

Dr. Lu works closely with the company's technology, manufacturing, and operation leaders to advance TE's overall manufacturing capabilities in leading automation manufacturing methods. He charters TE global assembly automation manufacturing technology strategy, which guides the company's advanced manufacturing technologies, initiatives, and the overall development of new manufacturing processes.
Dr. Lu joined TE Connectivity from The Boeing Company, where he served as a Technical Fellow in Boeing Research and Technology. He part-time taught undergraduate and graduate level courses at the University of Washington as an Affiliate Assistant Professor. Prior to that, he held senior engineering positions at the Pilkington and Intermet companies.

He earned an MIT Sloan Executive Certificate in Management and Leadership. He is a licensed and registered Professional Engineer in US. He has more than 150 combined journal, conference, and patent publications.

Feng Chia University in Taiwan, (BS & MS, Material Science)
Marquette University, Wisconsin (MS, ME)
Virginia Tech, Virginia (MS, Industrial and Systems Engineering)
University of Washington, (MS & PhD, Industrial and Systems Engineering)

14:50-15:40 "THE EVOLVING U.S.-CHINA RELATIONSHIP IN 2018: WHAT CAREER AND BUSINESS EFFECTS CAN CHINESE AMERICAN ENGINEERS EXPECT?"

Nelson G. Dong J.D. A partner in Dorsey's Corporate group, Chair of the National Security Law practice and co-Chair of the Asia-Pacific practice

Abstract:
Despite their efforts to establish some working relationship, President Donald Trump and President Xi Jinping are facing an unprecedented level of tension and disagreement between the United States and China. What can these sharp differences in national industrial policy, regard for intellectual property, views in sovereignty and national security, trade and economics and global business practices mean for Chinese American engineers working in the technology sector? Nelson Dong, a member of CIE-Seattle's Board of Advisors and a highly respected international technology attorney at the Dorsey & Whitney law firm, will review these current bilateral disagreements between the U.S. and China (including many recent U.S. legal changes) and explain their potential impacts upon the careers and businesses of many Chinese American technologists in industry as well as in higher education and government service. Nelson will draw his talk not only from his more than 40 years of practical international legal experience but also from his service as a long-time director of the Washington State China Relations Council and the National Committee on US-China Relations and as a member of the Committee of 100.

Bio: A partner in Dorsey's Corporate group, Chair of the National Security Law practice and co-Chair of the Asia-Pacific practice

Nelson has substantial experience in counseling e-commerce, semiconductor, electronics, computer hardware and software, and biomedical and biotechnology companies with special expertise in domestic and international technology licensing, outsourcing and manufacturing in Asia and U.S. export control matters.
He has frequently written about intellectual property law, U.S. export control law, technology related business transactions between the U.S. and Asian or European countries, international strategic alliances, the Exon-Florio law on foreign investments in U.S. technology companies, university-based technology transfer, academic entrepreneurship, academic conflicts of interest and the financing and organization of high technology businesses. He has lectured on such topics throughout the United States and in Austria, Canada, England, the Netherlands, Hong Kong and the People's Republic of China.

- Recognized in IAM Patent 1000 - World's Leading Patent Practitioners, 2013
- Named a "Top Rated Lawyer" in Technology Law by American Lawyer Media, 2013
- Listed as a Washington Super Lawyer, 2011

Yale Law School (J.D.)
Stanford University (A.B. Economics), Phi Beta Kappa