### CIE/USA-DFW **ANNUAL CONVENTION**

and Asian American Engineer of the Year pre-Award Dinner

### TECHNOLOGY FUSION-INVENT A BETTER **FUTURE**

FRIDAY AUGUST 16, 2019 RENAISSANCE DALLAS AT PLANO **LEGACY WEST HOTEL** 6007 LEGACY DRIVE, PLANO, TEXAS



Chinese Institute of Engineers/USA **Dallas - Fort Worth Chapter** 

美洲中國工程師學會 達福分會





# WE'RE PLANNING A BETTER FUTURE FOR OUR COMMUNITIES.

TOGETHER, WE'RE ADVANCING ENERGY, CREATING NEW JOBS AND SUPPORTING ECONOMIC GROWTH.

The infrastructure of today won't support the energy needs of our future. That's why Oncor is investing in new technology to deliver reliable power from multiple sources, including renewable energy. It's happening right here, right now in our communities.

We're empowering customers to save money and be wiser about their energy use by supplying them with new smart meters. And we're helping business be more competitive – and attracting new ones – resulting in more jobs and more local revenue. It's a plan that has economic and environmental impact. It's a plan we can all believe in.

WE DELIVER.



### **Message from President**



**Simon Chang** 

### President of CIE/USA-DFW

On behalf of the Chinese Institute of Engineers/USA Dallas-Fort Worth Chapter (CIE/USA-DFW), I warmly welcome all of you to our 30th anniversary annual convention and 18th AAEOY pre-award dinner!

CIE/USA is a nation-wide, non-profit professional organization that promotes technical and scientific excellence, professional advancement, and leadership development for Asian-Americans. CIE/USA was established in 1917 and the DFW Chapter is one of its 7 chapters. We have been serving the local community for 30 years with over 600 active members and numerous annual events. We are one of the most active non-profit professional organizations in the DFW area. CIE/USA-DFW has many wonderful volunteers who possess the passion to deliver quality programs and make positive impacts to all age groups in the DFW area. Our flagship and sponsored programs include but are not limited to: (1) VEX Robotics competitions, Student Engineering and Creativity Competition (SECC), MathComp MathFun (MCMF), Young Achiever Award (YAA), speech contests, and leadership camps for the youth; (2) Spring and Fall technical symposiums for professionals. Starting in 2018, the DFW

chapter began to provide more learning opportunities for college students and young professionals. In addition to our Leadership and Career Development (L&CD) seminar in the Fall Symposium, we started to provide mentoring programs to college students and young professionals. Today, we are serve over 5,000 people of all ages annually through many successful activities organized by our 600+ CIE members and volunteers.

Our executive officer team continues to focus on building a sustainable growth for the organization through several initiatives. First, we continue to strengthen our collaborations with other local professional groups and universities. This year we co-hosted a new CIE flagship STEM program Student Engineering and Creativity Competition (SECC) with The University of Texas at Dallas. This is a program to support national-wide DiscoverE's Engineers Week activities. Second, expand our volunteer base in the DFW community through online recruiting. Third, upgrade our community website to help improve our program execution and community outreach efficiency.

The theme of the convention this year's is "Technology Fusion - Invent a Better Future." At the same weekend of our 30th anniversary annual convention, we also have the distinct honor to host the 18th Asian American Engineer of the Year (AAEOY) Award and Conference, an annual recognition event on a national platform to honor outstanding Asian American professionals.

On behalf of the CIE/USA-DFW Chapter, I sincerely thank our volunteers for their dedication and tireless work. I also want to thank all of our board of directors and advisors for their guidance and coaching. Last but not least, I want to pass on my gratitude towards all of the sponsors and members for their great support. Let us celebrate and work together to build a better tomorrow!

Sincerely,

Simon Chang



### 2019 Technical Symposium Program

### August 17th, 2019

### **Keynote Session**

Legacy-C/D/E Ballroom

Honorary Symposium Chair: Dr. Peter Crouch, Dean, College of Engineering, The University of Texas at Arlington Symposium Chair: Simon Chang, CIE/USA-DFW President

Session Chair: Dr. Peter Crouch, Dean, College of Engineering, The University of Texas at Arlington

1:00 - 1:05 PM *Opening Remarks* 

**Dr. Peter Crouch**, Dean, College of Engineering, The University of Texas at Arlington

1:05 - 1:30 PM Keynote Speech 1: "Inventing a Better Now"

Dr. Alexa Dembek, Chief Technology and Sustainability Officer, DuPont

1:30 - 1:55 PM Keynote Speech 2: "Why a world with AI needs more EQ"

Dr. Tsu-Jae King Liu, Dean, College of Engineering, The University of California at Berkeley

1:55 - 2:20 PM Keynote Speech 3: "Technology Fusion for Novel Discovery and Technology Management"

Dr. Sean Wang, President, Industrial Technology Research Institute (ITRI) International Inc.

### Session 1 – Artificial Intelligence, Machine Learning, and IoT

Windrose-1 Ballroom

Session Chair: Dr. Andrew Stevens, Machine Learning Scientist, Sivananthan Laboratories

2:30 - 2:55 PM "Artificial Intelligence for Autonomous Resiliency in Software Defined Network"

**Dr. Rulei Ting**, Area Manager MTS, AT&T

2:55 - 3:20 PM "Digital Fusion for Smart Cities"

**Dr. Shuo-Yan Chou**, Professor and Director of IoT Innovation Center, National Taiwan University of Science and Technology

3:30 - 3:55 PM "Artificial Intelligence: The Road Forward"

Dr. Gopal Gupta, Department Head, Computer Science, The University of Texas at Dallas

3:55 - 4:20 PM "Execution is Everything: Delivering Data Science Projects with Impact"

Sabina Stanescu, Principal Data Scientist, Altair

4:20 - 5:00 PM **Networking** 



### 2019 Technical Symposium Program

### <u>Session 2 – Energy is Technology's Next Big Thing</u>

Windrose-2 Ballroom Session Chair: Bill Muston, R&D Manager, Oncor Electric Delivery Company

- Matthew Watson, General Manager, Texas Instruments Incorporated
- 3:55 4:20 PM "Converging Technologies to Improve the Distribution Control Room"

  Tony Bruton, Director of T&D Services, Oncor Electric Delivery Company
- 4:20 5:00 PM **Networking**

### Session 3 – Leadership & Career Development

Windrose-3/4 Ballroom Session Chair: Rod Wetterskog, Assistant Dean, The University of Texas at Dallas

- 2:30 2:55 PM "Building and Sharing a Personal Leadership Philosophy"

  Gary Hamatani, Director Chief Project Engineer, The Boeing Company
- 2:55 3:20 PM "Leadership is a Journey, Not a Destination" **Debbie Dennis**, Chief Customer Officer and SVP Human Resources & Corporate Affairs,

  Oncor Electric Delivery Company
- 3:30 3:55 PM "Authenticity Propels Leadership" **David Lu**, Vice President, AT&T
- 3:55 4:20 PM "Academic Leadership, Management, and Administration"

  Dr. Hanchen Huang, Dean, College of Engineering, The University of North Texas
- 4:20 5:00 PM **Networking**



### **2019 Convention Program**

### **Evening Banquet**

### **Jeffrey Cornell, Master of Ceremonies**

5:30 - 6:20 PM	VIP Reception, Banquet Registration and Social Hour
6:30 - 6:35 PM	Opening Remarks <b>Greg Nichols,</b> Convention Chair, CIE/USA-DFW
6:35 - 7: 15 PM	Dinner Performances Special Recognition
7:15 - 7:35 PM	President's Speech and 30th Anniversary Ceremony <b>Simon Chang</b> , President, CIE/USA-DFW
7:35 - 7:40 PM	Introduction of Keynote Speaker  Dr. Faa-Ching Wang, Founding President, CIE/USA-DFW
7:40 - 8:10 PM	Dinner Keynote Address <b>Dr. Chi-Foon Chan</b> , President and Co-CEO, Synopsys
8:10 - 8:30 PM	Young Achiever Award Presentations  Mark Reidmiller, Young Achiever Award Chair, CIE/USA-DFW  Tiger Zhou, Vice President, Youth Programs, CIE/USA-DFW
8:30 - 8:55 PM	Asian American Engineer of the Year Award Sponsor Recognition <b>Dr. Claire Jung</b> , AAEOY Chair, CIE/USA
8:55 - 9:05 PM	Corporate Outstanding Community Service Awards  Dr. Allan Zhong, Chairmen of the Board, CIE/USA-DFW  Simon Chang, President, CIE/USA-DFW
	Texas Instruments Incorporated Oncor Electric Delivery Company Diodes, Inc.
9:05 - 9:15 PM	Election Results <b>Dr. Allan Zhong</b> , Chairmen of the Board, CIE/USA-DFW
9:15 - 9:20 PM	Closing Remarks  Greg Nichols, Convention Chair, CIE/USA-DEW





### ANALOG | DISCRETE LOGIC | MIXED-SIGNAL

Diodes Incorporated is a leading global manufacturer and supplier of high-quality application specific standard products within the broad discrete, logic, analog and mixed-signal semiconductor markets, serving the computer, consumer electronics, communications, industrial and automotive industries.

### **BUSINESS OBJECTIVE**

To consistently achieve profitable growth, utilizing our innovative and cost-effective semiconductor packaging technology, suited for high growth electronics markets.

#### Worldwide Headquarters

4949 Hedgcoxe Road, Suite 200, Plano, TX 75024 USA Tel: 972-987-3900 Email: inquiries@diodes.com

diodes.com

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### **Evening Banquet Keynote Speaker**



Dr. Chi-Foon Chan
President & Co-CEO
Synopsys

As Synopsys' co-CEO, Dr. Chi-Foon Chan shares responsibility for crafting vision and strategy, leading the company, and ensuring execution excellence in support of our customers' success. As the company's President and COO, a role Dr. Chan held for 14 years prior to his 2012 appointment to President and co-CEO, he guided internal operations and worldwide field organizations.

Dr. Chan joined Synopsys in 1990 as Vice President of Applications and Services where he helped build the Technical Field organization.

He has sponsored several key initiatives such as entering the IP market, and personally facilitated key acquisitions such as Avant!, Virage Logic, Magma Design Automation and SpringSoft.

In 2014, he led Synopsys' entry into the software testing market with the acquisition of Coverity, and the software security market with the acquisition of Codenomicon. Prior to Synopsys, Dr. Chan contributed to industry leading companies like NEC Corporation, where he was General Manager of the microprocessor group, responsible for marketing all NEC chip devices in North America. Prior to NEC, Dr. Chan was an engineering manager at Intel Corporation.

Dr. Chan holds an M.S. and a Ph.D. in Computer Engineering from Case Western Reserve University; and a B.S. in Electrical Engineering from Rutgers University.



### **Special Recognition Award**



### SPECIAL RECOGNITION AWARD presented to

### Dr. Chi-Foon Chan

President & Co-CEO Synopsys

### For Visionary Leadership and Strategy in the EDA Industry

### CHINESE INSTITUTE OF ENGINEERS/USA DALLAS-FORT WORTH CHAPTER

August 17th, 2019

Allan Zhong

Dr. Allan Zhong Chairman Simon Chang

Simon Chang President



### Symposium Keynote Opening Remarks



Dr. Peter Crouch
Dean, College of Engineering
The University of Texas at Arlington

Peter E. Crouch joined UTA in August 2016 as dean of the nationally ranked College of Engineering and as a professor of electrical engineering. Since arriving he has pursued vigorous support for the UTA President's strategic vision for The University of Texas at Arlington, and the powerful growth of the University and the College. Developing the strategic links between the College and its stakeholders, especially in the DFW metro area, is one of his most important goals.

Dean Crouch has served a total of 21 years as dean of Arizona State University's Ira A. Fulton School of Engineering and dean of engineering at the University of Hawai'i at

Mānoa. In his long tenure as a dean, Crouch has led significant enrollment growth, established strong partnerships with businesses and workforce leaders, established strong relationships with community college systems and K-12 institutions, developed multidisciplinary relationships and programs between colleges and their faculties, and elevated the colleges' national rankings. He has helped secure millions of dollars in federal support for major research centers and has led expansion of engineering programs to China, India and Mexico, and enhanced online offerings for working professionals.

A native of England, Crouch earned his undergraduate degree in engineering science from Warwick University in Coventry in 1973, and his master's degree in control theory from Warwick the following year. Crouch then earned his Ph.D. in applied sciences from Harvard University in 1977. After joining Arizona State University in 1984, he rose through the academic ranks before being named dean of what would become the Fulton School of Engineering in 1995. He also served as ASU's vice provost for global engagement from 2005 to 2006. He was appointed the dean of Engineering at the University of Hawaii at Mānoa in July 2006.

In his previous roles, Crouch successfully enlisted the help and support of major corporations including Intel, Boeing, Northrop Grumman Corp., Motorola, and others to advance excellence in engineering education. At ASU, he worked closely with university's leaders to secure the \$50 million naming gift for the Ira A. Fulton Schools of Engineering and helped lead the school into the top 50 in the U.S. News and World Report rankings.



### **Special Recognition Award**



### SPECIAL RECOGNITION AWARD presented to

### Dr. Peter E. Crouch

Dean, College of Engineering
The University of Texas at Arlington

### For

Outstanding Leadership in Engineering and Education

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Simon Chang President



### Symposium Keynote Speaker



Dr. Alexa Dembek

Chief Technology and Sustainability Officer DuPont Alexa holds a Bachelor of Science degree in Chemistry from Northern Illinois University and a PhD in Chemistry from Pennsylvania State University. Alexa is based in Wilmington, Delaware and she resides in Kennett Square, Pennsylvania, with her husband Scott and their three sons.

#### **Abstract:**

It's common to talk about the future – what it will look like and how we can live better, tomorrow. But DuPont doesn't look at the world that way. Our teams apply diverse expertise to help our customers today, by delivering essential innovations in key markets including electronics, transportation, construction, water, health and wellness, food and worker safety. In short, DuPont innovations are everywhere around us and are driven by the essential needs of our planet and our customers. My talk will highlight how marrying together our scientific capabilities with the U.N.

Sustainable Development Goals drives these essential innovations, how we are fusing our scientific capabilities to achieve results right now and how we tap into the diversity of our global culture to win in the marketplace.

### **Inventing a Better Now**

**Dr. Alexa Dembek** is the Chief Technology & Sustainability Officer for DuPont. A 28-year DuPont veteran, she champions the company's entrepreneurial mindset to spur growth, while fostering close collaboration with customers.

Today, Alexa leads business and innovation strategy alignment to make the most impactful portfolio choices for Du-Pont. She is passionate about elevating the role sustainability plays in these investment decisions and how DuPont can help customers achieve their own sustainability ambitions with our solutions



### **Special Recognition Award**



### SPECIAL RECOGNITION AWARD presented to

### Dr. Alexa Dembek

### Chief Technology and Sustainability Officer DuPont

## For Visionary Leadership in Technology and Sustainability



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Simon Chang President



CIEXUSA - DFW 2019

### **Symposium Keynote Speaker**



Dr. Tsu-Jae King Liu

Dean, College of Engineering The University of California at Berkeley

### Why a world with AI needs more EQ

Tsu-Jae King Liu was born in Ithaca, NY and raised in the San Francisco Bay Area. She earned her B.S., M.S. and Ph.D. degrees in Electrical Engineering from Stanford University. From 1992 to 1996 she worked at the Xerox Palo Alto Research Center as a Member of Research Staff to research and develop thin-film transistor technology for high-performance flat-panel display applications. In August 1996 she joined the faculty of the Department of Electrical Engineering and Computer Sciences (EECS) at the University of California at Berkeley, where she is now Dean and Roy W. Carlson Professor of Engineering. Her past administrative leadership roles include Faculty Director of the UC Berkeley Microfabrication Laboratory, EECS Department Chair, Associate Dean for Research, and Vice Provost for Academic and Space Planning.

Dr. Liu's awards include the Ross M. Tucker AIME Electronics Materials Award for seminal work in polycrystal-line silicon-germanium thin films, an NSF CAREER Award for research in thin-film transistor technology, the DARPA Significant Technical Achievement Award for development

of the FinFET, the Electrical Engineering Award for Outstanding Teaching at UC Berkeley, the IEEE Kiyo Tomiyasu Award for contributions to nanoscale MOS transistors, memory devices, and MEMs devices, the Intel Outstanding Researcher in Nanotechnology Award, the SIA University Research Award, the SRC Aristotle Award, and the IEEE Aldert van der Ziel Award for distinguished educational and research contributions to the field of electronic devices and materials. She has authored or co-authored over 500 publications and holds over 90 U.S. patents.

Dr. Liu is a Fellow of the Institute of Electrical and Electronics Engineers (IEEE) and the National Academy of Inventors, and she an elected member of the U.S. National Academy of Engineering. She also serves on the Board of Directors for Intel Corporation.

#### **Abstract:**

The rapid pace of technological innovation has resulted in a dynamic and unpredictable world that is increasingly dependent on engineered devices, processes and systems. A 2017 workforce report by the McKinsey Global Institute indicates that all workers will need to adapt as their occupations evolve with increasingly capable machines. In the age of artificial intelligence (AI), workers will spend more time on activities that require social and emotional skills, creativity, high-level cognitive capabilities and other skills that are relatively hard to automate.

There is growing evidence of the importance of a high emotional quotient (EQ) as a predictor of success and organizational performance. It is clear that a high EQ will be necessary for individuals to succeed in a rapidly evolving workplace. This is not to say that core competency in technical skills is not important, but rather that EQ is what makes a leader stand out among peers of comparable IQ. In a World Economic Forum Future of Jobs report, "human skills" such as emotional intelligence, leadership and social influence are qualities that will see increased demand in the future.

In this talk I will describe some initiatives being undertaken in the College of Engineering at the University of California, Berkeley to cultivate EQ in our students so that will succeed as innovators and be effective leaders in our global society, toward a brighter future for all.





### **Special Recognition Award**



### SPECIAL RECOGNITION AWARD presented to

### Dr. Tsu-Jae King Liu

Dean, College of Engineering
The University of California at Berkeley

For Outstanding Leadership in Engineering and Education



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Simon Chang President



### Symposium Keynote Speaker



Dr. Sean Wang

President,
Industrial Technology Research Institute (ITRI)
International Inc.

### Technology Fusion for Novel Discovery and Technology Management"

**Sean Wang** is the President of ITRI International Inc. (San Jose, California), a subsidiary of ITRI, since June 2005.

ITRI International Inc. is ITRI's presence in North America. It engages in incubation of startups, in Silicon Valley and from Taiwan, technology transfer, IP business, high-level training, and recruiting as well as and facilitates R&D collaboration and contract research. The incubation practice has involved, in various degrees, with more than 150 startups in Silicon Valley and from Taiwan to accelerate technology and/or product development by partnering up with ITRI's labs, to get product validation from major early customers, to explore broader market applications in Asia and beyond, and to be considered for venture funding.

Since 2011, Sean and the team have also been connecting the medical devices value chain in Silicon Valley with Taiwan's large companies and startups as well as physicians and researchers in that sector by providing an annual training and networking program. The program has also helped to build a well-connected community of medical devices across Taiwan and Silicon Valley.

Sean first joined ITRI in July 2004 and was the General Director of Industrial Economics Knowledge Center (IEK) until Oct. 2005. IEK conducts market research, strategic planning, and business consulting for various industrial sectors.

Between Feb. 2016 and Aug. 2018, Sean was also the General Director of ITRI's International Center (Hsinchu, Taiwan). At ITRI's International Center, Sean and the team have built collaboration platforms to facilitate collaborations between various R&D teams, at ITRI and other R&D organizations as well as Taiwanese companies, with international partners, including government agencies, R&D organizations, universities, large companies and startups.

He was trained in Chemical Engineering with Ph.D. and M.S. degrees from West Virginia University and B.S. degree from National Taiwan University.

#### **Abstract:**

The awareness of technology fusion started in the 1980s. In the 1990s, technology fusion attracted more attention when diffusion and convergence among a few important technologies began to have a significant impact on the products and strategies of firms in several industries from ICT to consumer electronics, to pharmaceuticals.

Technology fusion can be for frontier scientific, especially life science-centric, exploration, which could eventually emerge to novel disciplines and feasible new commercial solutions, and can also be as an integral part of strategy for technology management and product development efforts. The former is an approach with the value in high-risk, highpayoff approaches to discovery and invention. Whereas, the later is adept at using a diversity of technologies to create new products that transform markets. This presentation will discuss the approaches, and selective example organizations, of the combination of experts, from several different fields, and interdisciplinary scientist-leaders as well as the acceleration of new ideas and discoveries. Will also discuss the drivers of merged technologies and the setting of increasing the likelihood of generating new fusions. This will contribute to corporate technology management with the engagement of high-value innovation networks that enable industry cross-overs and technology fusion. Examples will also be given for corporates with visions and practices of technology fusion as a part of technology and competitive strategies.

### **Special Recognition Award**



### SPECIAL RECOGNITION AWARD presented to

### Dr. Sean Wang

President,
Industrial Technology Research Institute (ITRI)
International Inc.

### For Visionary Leadership in Research and Development



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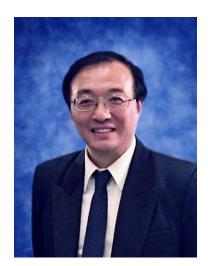






### **Symposium Speakers**

### Artificial Intelligence, Machine Learning, IoT



Dr. Rulei Ting

Area Manager MTS

AT&T

### Artificial Intelligence for Autonomous Resiliency in Software Defined Network

**Dr. Rulei Ting** has been with AT&T & Bell Labs for 20+ years, with responsibilities from Distinguished Member of Technical Staff to Senior Technical Director and Area Manager. Started in Bell Labs Machine Learning Research, Rulei apply adaptive and multiscale Wavelets to network traffic analysis that enhanced detection of potential fiber faults; demonstrated traffic forecasting and dynamic resource allocation using Wavelets. Rulei earned B.S. from Shanghai Jiao Tong University, China; Ph.D. from CUNY, New York; and Executive Master's in Technology Management at Wharton and Penn Engineering of University of Pennsylvania.

#### **Abstract:**

Inspired by biological systems, artificial neural network constructs nonlinear models on extracted features by employing backpropagation based deep learning. With early exploratory work at Bell Labs Artificial Intelligence Research on image recognition which became foundation of today's widespread automatic check-reader in mobile devices, we applied deep learning to network traffic congestion control and dynamic resource management. In the dynamic software defined network, the orchestration of virtualized functions and their resource management continue to face new challenges. We explore biologically stimulated intelligence and autonomous resiliency in SDN controller platform that is geared towards next generation network scaling and 5G network operations.



Dr. Shuo-Yan Chou

Distinguished Professor and Director of IoT Innovation Center, National Taiwan University of Science and Technology

### **Digital Fusion for Smart Cities**

**Dr. Shuo-Yan Chou** is a distinguished professor and the director of Center for Internet of Things Innovation at the National Taiwan University of Science and Technology and is an advisory to Taipei City Government on smart city. His current research interests are innovative services for smart city, smart industry and smart energy with the fusion of IoT, blockchain and AI and has been active in international cooperation. He has served as a dean, editor-in-chief, general chair for international conferences and visiting professor at MIT, ETH, Peking University, HKUST and others. Dr. Chou received his Ph.D. in industrial and operations engineering from the University of Michigan.

#### **Abstract:**

Smart city development has picked up its momentum in recent years due to the prevalence of the connectivity brought along by the Internet of Things (IoT). The objective of making a city smart should however not be making the job of governance easier but to empower the citizen. Together with blockchain and artificial intelligence (AI), not only can activities in cities be captured holistically but also the integrity and the characterization of those activities can be established effectively.

With the physical city integrated seamlessly into the digital world, streamlined and datadriven solutions solving the pain points in cities can be developed and deployed accordingly. Furthermore, the frameworks of Industry 4.0 and Industrial Internet help to enable an integral approach for resolving problems precisely. In this talk, the notion of smart in the context of cities and the newly formed digital fusion are elaborated. Subsequent smart applications and services supporting the evolutionary goals of cities are illustrated.



### Symposium Speakers Artificial Intelligence, Machine Learning, IoT



Dr. Gopal Gupta

Department Head Computer Science The University of Texas at Dallas

### **Artificial Intelligence: The Road Forward**

**Gopal Gupta** is the head of the Computer Science Department at the University of Texas at Dallas where he holds the Erik Jonsson professorship. His areas of research interest are in automated reasoning, computational logic, machine learning, programming languages, and assistive technology. He has published extensively in these areas. His group has also authored many software systems, many of which are publicly available. His research work has also resulted in commercial software systems that have formed the basis of two startup companies. He has won several best-paper awards as well as the ICLP 2016 most influential paper award for his work on coinductive logic programming. He obtained his MS & PhD degrees from UNC Chapel Hill in 1987 and 1991, respectively, and his B.Tech in Computer Science from IIT Kanpur, India, in 1985.

#### **Abstract:**

The field of Artificial Intelligence (AI) is currently receiving a lot of attention. Two major components of intelligent behavior are the ability to reason and the ability to learn. In the context of AI, these are referred to as machine learning and automated reasoning, respectively. We will give an overview of machine learning and automated (common sense) reasoning, as well as discuss their limitations. We will argue that both machine learning and automated (common sense) reasoning are essential to the success of the AI enterprise.



Sabina Stanescu

Principal Data Scientist Altair

### **Execution is Everything: Delivering Data Science Projects** with Impact

**Sabina**'s love for statistics and data brought her on a journey from academia to Data Science in industry. Sabina completed her MSc in Plant Ecology at the University of Guelph, after which she started her journey in Data Science at Angoss Software.

Sabina is currently the Principal Data Scientist at Altair, working in the Business Data Science team to solve a wide variety of Data Science problems across different industries and use cases. Previously, she had worked at Points as Lead Data Scientist in Marketing and as Lead Product Manager for Machine Learning, where she was integrating machine learning into Points' products.

#### Abstract:

As Data Science professionals, we all want to do innovative, impactful work. Thus, our work on data munging and building machine learning models cannot happen in isolation from business objectives and infrastructure of our organizations. In this talk, I will explore ways to identify impactful, executable Data Science work, and how it can make to production. I will discuss what it means to have a model in production, including ways to score the model in real-time versus batch, and how to have model scores available for your application, such as through an API or database. Finally, I will tie everything together with some of the processes and frameworks that allow for iteration and testing to complete the full life-cycle of model deployment..



### Symposium Speakers Energy is Technology's Next Big Thing



### Sameer Pendharkar

Senior Fellow and Analog Technology Development Manager Texas Instruments Incorporated

### **Power Electronics Technology for Tomorrow's Solutions**

Sameer did his undergraduate and graduate studies in Electrical Engg. at IIT Bombay and at the University of Wisconsin-Madison. He joined Texas Instruments in 1996 and is currently a TI Senior Fellow and Technology Roadmap Manager. He and his team are responsible for setting and executing the overall technology development strategy for TI. He has published over 90 technical papers and given numerous short course and tutorial presentations in power technology and has been granted more than 170 U.S. patents. For his work, Sameer was awarded the prestigious Technology Innovation award by The Academy of Medicine and Science of Texas (TAMEST).

#### **Abstract:**

With increasing population and increase in per capita energy consumption and limited energy resources, it is critical to not only look at alternate energy sources but also to improve the efficiency in how this energy is used.

Power electronics technology is critical in improving the efficiencies in generation, conversion, storage and use of energy and is instrumental for the future.

Improvements in power technology are driving key application areas like electric and hybrid vehicles as well as enabling increased industrial automation. The presentation will talk about some of the key innovations and technological developments in high power electronics along with trends and performance improvements achieved in the industry.



Dr. BorYann Liaw

Directorate Fellow Idaho National Laboratory

### **Battery Technology and Safety**

**Dr. Boryann (Bor Yann) Liaw** is a Directorate Fellow in the Energy & Environmental Science and Technology Directorate at Idaho National Laboratory. His research focuses on fundamental studies of battery reliability, safety, and failure analyses, electrification of advanced vehicles and charging infrastructure. Dr. Liaw received his doctorate in materials science and engineering from Stanford University. He is a Fellow of the Electrochemical Society and past President of International Battery Association. He was a university faculty member at the University of Hawaii and professional consultant in industry for more than 27 years before joining INL in May 2016.

#### **Abstract:**

Lithium-ion battery technology is propelling the electrification of our daily life deep into high-bandwidth telecommunication, e-commerce, renewable power generation, grid infrastructure modernization, and transportation/mobility. Reliability and safety remain as grieve concerns for market acceptance. There is a significant knowledge gap in the battery technology deployment. How to improve the reliability and safety of lithium-ion batteries is not a trivial question and a grand challenge for the battery research. Here the fundamental technology barriers will be explained and possible solutions discussed. A quantitative failure mode and effect analysis needs to be developed to address reliability and safety issues at a very refined level in order to mitigate the risks.





### Symposium Speakers Energy is Technology's Next Big Thing



**Matthew Watson** 

General Manager Texas Instruments Incorporated

### No More Cords: Wirelessly Transferred Electricity May Power the World's Future

Matt Watson is currently the General Manager for the C2000 Microcontroller business at Texas Instruments. Under Matt's leadership the business has experienced significant growth in digital power and motor control applications. Prior to joining C2000, Matt managed the Automotive Infotainment Processors business at TI leading several generations of successful automotive processors to help TI achieve market leadership. Prior to joining TI, Matt held research and development positions at Dolby Laboratories and Motorola Semiconductor. He holds Engineering and Music degrees from the University of Miami, FL.

#### **Abstract:**

The push for high-power wireless power transfer has accelerated over the last few years in parallel with the growth of industrial automation and autonomous systems. Wireless power will have an impact in the Industrial Internet of Things, which is the rapidly expanding collection of connected machines, computers and sensors that is making everything from healthcare to airplanes and energy production smarter and more efficient. Additionally, there are opportunities to replace expensive and bulky charging cabling from electric vehicles, which can speed the adoption and improve convenience for consumers while maintaining high efficiency. Wireless power transfer will allow these devices to be more mobile and, with no need for plugs and connectors, to be built fully sealed so they can operate reliably in a range of challenging, variable environments.



**Tony Bruton** 

Director of T&D Services Oncor Electric Delivery Company

### Converging Technologies to Improve the Distribution Control Room

**Tony Bruton** earned his Bachelor's of Science in Electrical Engineering from Texas Tech University in 2000. He began working for Oncor as a substation design engineer. For several years, he managed Oncor's high voltage grid in east Texas then managed the group that designed and built high voltage transmission lines. He also managed the routing and acquisition of rights of way for new lines in west Texas. Mr. Bruton's current role as Director of T&D Services involves ensuring a reliable computer system that monitors and controls Oncor's Transmission and Distribution.

#### **Abstract:**

Operation of the electric utility control room has become more efficient through converging technologies. The implementation of intelligent devices and associated mesh telecommunications allows for powerful, after the fact, data collection as well as real time grid evaluation. Those devices such as team operated switches and fault locating sensors are being deployed on a large scale. Accurate digital connectivity models and spatial models are combining to provide improved control and situational awareness at Distribution voltage levels. Improvements have been made in the deployment of advanced analytics that utilize the large amount of data being collected by the utility's sensors and systems. Mobile applications have entered the control room space as a much more streamlined and integrated way to move data between the control room and the field crews.



### Symposium Speakers Career and Leadership Development

Gary Hamatani

Director - Chief Project Engineer The Boeing Company

### **Building and Sharing a Personal Leadership Philosophy**

Gary Hamatani is the Chief Project Engineer for 737 MAX Development at Commercial Airplanes for The Boeing Company. Named to this role in December of 2017, Hamatani is responsible for the program management and leadership of the design, production and certification for the final three development models of the 737 MAX family. Gary is a graduate of the University of Washington in Seattle, Washington with a Bachelor and Master's degree in Mechanical Engineering. He has also completed the Senior Executive Program at the London Business School and is a Registered Professional Engineer in the State of Washington.

#### **Abstract:**

In this talk, Gary will share tips and lessons learned during his personal leadership journey on how a Leadership Philosophy can be developed and shared with your workgroup, team and leaders.

Gary believes that a Leadership Philosophy captures the essence of who we are, how we lead and more importantly how we interact with others.



### **Debbie Dennis**

Chief Customer Officer and SVP Human Resources & Corporate Affairs Oncor Electric Delivery Company

### Leadership is a Journey, Not a Destination

**Debbie Dennis** is Oncor's Chief Customer Officer and SVP Human Resources & Corporate Affairs. In her current role she has responsibility for customer service, community relations, economic development, branding and communications, as well as all human resource planning, policy, performance management, rewards strategies, sourcing, talent management and employee and labor relations. She is also responsible for the strategic direction of Oncor's philanthropy, community involvement and employee engagement initiatives and their alignment with the Company's business goals. Dennis is the Loaned Executive Director of the Dallas Mayor's Youth Fitness Initiative and serves on the Board of the Dallas Regional Chamber and a number of non-profit boards, including the American Foundation for the Blind, WiNGS of Dallas, Baylor Scott and White Health and Wellness Institute, DRC Executive Women's Roundtable, a member of the AHA Dallas Heart Walk 2019 Executive Leadership Team.

#### **Abstract:**

Whether you're an aspiring leader or far down your career path, it's important to continually work on developing your skills. This presentation will cover several topics, including relationship-building, communication, identifying your personal brand, building your business acumen, and more. Debbie will share several practical, actionable and motivational ideas that she has uncovered during her personal leadership journey. Her presentation will provide key takeaways to help you grow as a leader, serve as positive role model for your team, and have a lasting and long-term impact on your company.





### Symposium Speakers Career and Leadership Development



David Lu
Vice President
AT&T

### **Authenticity Propels Leadership**

**David Lu, Vice President, SDN Platform & Systems, is responsible for engineering AT&T's next generation SDN (Software Defined Network) platform enabling AT&T network virtualization and OSS/operation process transformation. David is a well-respected leader across multiple technology domains including: large scale, real time software architecture and development, network performance and traffic management, work flow and policy-controlled automation, big data implementation (mining & analytics), machine learning, artificial intelligence, and network operations processes. David holds 44 patents and has received numerous leadership and technical awards including the CIE Engineer of the Year Award in 2017 and the IEEE Reliability CQR Chairman's Award in 2015. David was accepted to the world-renowned Shanghai Conservatory of Music and came to the U.S. to complete his college education; an undergraduate degree in Music (majoring in cello performance), and a graduate degree in Computer Science.** 

#### **Abstract:**

To have a successful career in today's fast changing technology driven business ecosystem, one must have not only superior technical knowhow, but also outstanding leadership skills. But, what is leadership really? Is leadership the same as managing a team? Is leadership the same as simply having good communication skills? This talk will focus on exploring the authenticity of a person, and how doing so can unleash one's leadership potential to its fullest in both the corporate setting and venture/start-up business environments.



Dr. Hanchen Huang

Dean, College of Engineering The University of North Texas

### Academic Leadership, Management, and Administration

Hanchen Huang has been the Program Director of Mechanical Engineering at RPI, Department Chair of Mechanical and Industrial Engineering at Northeastern, and Dean of Engineering at UNT. As a faculty member, he first earned tenure at RPI in 2005 and rose to the rank of full Professor in 2006. He has been Connecticut Clean Energy Fund Professor, Donald Smith Professor, Lupe Murchison Foundation Chair Professor, Royal Society of London KTP Visiting Professor, and Hsue Shen Tsien Engineering Science Visiting Professor. In professional societies, he has been elected to the Fellow rank of AAAS, ASM International, ASME International, and SES.

### **Abstract:**

The first part of this presentation provides a description of academic leadership at the Program/Department, School/College, and University levels in a "typical" American university. Augmenting this description are a discussion on differences and similarities among leadership, management, and administration; and another discussion on variations of leadership across different types of universities in the United States. The second part of this presentation offers a personal view on the challenges, opportunities, and rewards of academic leadership, as well as on the important traits of academic leaders.





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# 

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### 2019 Young Achiever Award

### Chair: Mark Reidmiller

The Young Achiever Award (YAA) is one of the flagship programs of CIE/USA-DFW. The YAA is designed to encourage the younger generations of CIE members to achieve high academic performance, develop leadership skills, develop a strong interest in science and engineering, and excel in extracurricular and community volunteer activities. These well-rounded skills will enable them to become strong leaders in this very competitive global marketplace, and achieve the greatest possible impact in our community.

CIE/USA-DFW is honored to have professionals from various industries to serve as judges in selecting the YAA recipients. Here are some of the impressive achievements of this year's recipients:

#### **Academic & STEM Achievements:**

- Intel International Science and Engineering Fair: Best in Category & Special Award Winner
- 2x Dallas Regional Science Fair Best of Category Winner
- 5x AIME Qualifier
- University of North Texas Undergraduate Research Fellow
- USA Physics Olympiad Honorable Mention
- NCWIT Aspirations in Computing National Honorable Mention
- Welch Summer Scholar Program Full Scholarship
- Cofounded the Bootstrap Computer Club
- Academic Decathlon State Championship as Team Captain
- DECA International Top 10 Finalist and Exam Score
- ACP Youth Award of Excellence Recipient
- United States of America Junior Mathematical Olympiad (USAJMO) Qualifier
- Math Prize for Girls Olympiad (MPFGO) Qualifier
- Two-time UIL Math State Champion, with the third perfect score in UIL history
- Participant in MIT and Caltech's Summer Science Program
- USA Computer Olympics (USACO) Gold Level
- USA Biology Olympiad Semifinalist
- Associate Editor of the Journal of Young Investigators

### **Community Service, Special Talent & Interest Achievements:**

- Gold Level President's Volunteer Service Award (5x)
- Program Director of the Health and Education Largesse Program
- Nationals Semi-Finalist, Dance, Regional 1st & 2nd Runner Up Solo Winner
- Drill Team Captain
- 5x Scholastic Art Gold Key Award
- Texas VASE Gold Seal
- First Place, Mountain View Guitar Competition
- Head Trombone Section Leader
- Clarinetist in the Greater Dallas Youth Orchestra Wind Symphony
- Co-founder and former President of Highland Park Youth Toastmasters club
- Grand Prize, 2019 Bocal Majority Solo Competition
- StarQuest Regional Dance Competition 1st Place Overall

The YAA trophies and scholarship will be presented to the recipients during the evening banquet of the CIE/USA-DFW annual convention on Friday, August 16th, 2019 at the Renaissance Dallas at Plano Legacy West Hotel in Plano, Texas.





### **2019 Young Achiever Award Recipients**



Yayi Ding Plano West Senior High Schoo



Kristina Fan Lebanon Trail High School



Richard Gao TAG Magnet School for the Talented and Gifted



Amy Li Highland Park High School



Anna Li Allen High School



Joseph Li Frisco High School



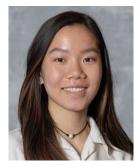
Kate Liang Texas Academy of Math and Science



Kevin Meng Plano West Senior High School



Derek Qin Plano West Senior High School



Kimberly Tsao Plano West Senior High School



Shang Wang Texas Academy of Mathematics and Science



Cameron Wee Lebanon Trail High School



Jennifer Xiong The Hockaday School



Jean Ye Highland Park High School



Andrew Zhang Plano West High School



Nicholas Zhong Plano West Senior High School





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- ◆我校学生在SATII中文考试, AP中文考试中均取得优异成绩。中文 CBE考试100%通过。在中文演讲 比赛,中华文化及才艺大赛中成绩斐然,

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## 2018-2019 CIE/USA-DFW Activities and Events 37

Date	Event	<b>Event Chair</b>	Location
August 18, 2018	2018 Annual Convention	Shawn Xiong	Renaissance Richardson Hotel
August 18, 2018	2018 Fall Symposium	Jensen Newman	Renaissance Richardson Hotel
December 9, 2018	2019 CIE Orientation	Simon Chang	CIE/USA-DFW Office
January 19, 2019	Student Engineering and Creativity Competition (SECC) Hands-on Workshop	Fred Fotsch	CIE/USA-DFW Office
February 16, 2019	CIE Night	Jan Benmard	JS Chen Dim Sum & BBQ
March 23, 2019	Student Engineering and Creativity Competition (SECC)	Dr. Min Chu Simon Chang	The University of Texas at Dallas
April 20, 2019	2019 Chinese Speech Contest	Wang Li	The University of Texas at Dallas
June 1, 2019	2019 CIE MathComp / MathFun	Dr. Tiger Zhou Dr. Sean Luo	Collin County Community College Spring Creek Campus
June 29, 2019	2019 DFW Youth English Speech Contest	Jan Benmard	The University of Texas at Dallas
July 30, 2018	2019 Dallas Chinese Youth Camp (CYC)	Ting-Whai Lee	The University of Texas at Arlington
July 20, 2019	Sponsored Program: 2019 Community Youth Leadership Camp (CYLC)	Shannon Chen	Texas A&M University-Commerce
August 17, 2019	2019 Young Achiever Award (YAA)	Mark Reidmiller	Renaissance Dallas at Plano Legacy West Hotel



#### CIE/USA-DFW Annual Convention

Chair: Shawn Xiong

CIE/USA-DFW celebrated its 29th Annual Convention evening banquet at the Renaissance Richardson Hotel on August 18th, 2018. The organizations accomplishments in 2018 were recognized by local governments, corporations, universities, and community organizations.

Twelve cities in the DFW area, including Addison, Allen, Carrollton, Farmers Branch, Frisco, Garland, Irving, Lewisville, McKinney, Plano, Richardson, and University Park, issued a Proclamation for declaring August 18th as CIE Day in appreciation of CIE/USA-DFW's contribution to the community.

During the evening banquet, Dr. Simon Yeung, Senior Vice President of R&D, PepsiCo, gave a banquet keynote speech on "On Integrating Complexity". Four companies, including



Farmers Branch Mayor Robert C. Dye, Ricardson Mayor Paul Voelker, Carrollton Deputy Mayor Pro Tem Young Sung at VIP reception



Shawn Xiong, 2018 CIE/USA-DFW Convention Chair, presenting the opening remarks

Oncor Electricity Delivery Company, Texas Instruments Incorporated, BNSF Railway, and Diodes Inc., were presented with the Outstanding Community Service Award. Nineteen high school students were presented with Young Achiever Award. Approximately 340 people attended the evening banquet, with representation from local media, government officials, and senior executives from various companies in the Dallas-Fort Worth area. In addition, individuals were honored with the Outstanding Community Service award for their commitment to the DFW community through volunteer work. These recipients were Anh Vo, owner Cindi's N.Y. Delicatessen, Wen-Shin Wang, Pricing Specialist at Texas Instruments Incorporated, and Shannon Chen, Director of Chinese Youth Leadership Camp.



Anh Vo, Shannon Chen and Wen-Shin Wang, recipients of Individual Outstanding Community Service Award



Dr. Allan Zhong, 2018 CIE/USA-DFW President, presenting the annual report





Dancing by YAA recipient Alice Hou



Cello Solo by YAA recipient Jiye Jay Xu



Taekwondo by YAA recipient Emily Zhu



Dancing by YAA recipient Shirui Zhong



Vocal Solo by YAA recipient Cindy Lu



Banquet Master of Ceremony Dr. Huang- Chun Wen



Dr. Chris Koh, Senior Director, R&D, PepsiCo, introducing Dr. Simon Yeung



Banquet Keynote Speaker Dr. Simon Yeung, Senior Vice President, R&D, PepsiCo





Paul Voelker, Richardson Mayor at VIP reception



Angie Button, State Representative at VIP reception



Dr. Yan Huang, UNT Interim Dean at VIP reception

## CIE/USA-DFW Chairwomen Dr. Claire Jung and President Dr. Allan Zhong present outstanding community service award to major sponsors



Fran Dillar, Diversity Director, Texas Instrument Incorporated



Charles Elk, VP of Dallas Operations, Oncor Electric Delivery Company Comapny



Francis Tang, VP, Discrete Business Grpup, Diodes, Inc.



Kim Cummings, AVP, BNSF Railway





Dr. Lun Tsuei, VP Youth Program kicking off YAA award ceremony



James Vanerdi, YAA Chair recognizing YAA recipients



Joel Austin, SVP, Oncor Electric Delivery Company, with YAA recipients



Dr. Jingrong Qian, VP & BU Manager, Texas Instruments Incorporated, with YAA recipients



Francis Tang, VP, Discrete Business Grpup, Diodes, Inc. with YAA recipients



Kim Cummings, AVP, BNSF Railway, with YAA recipients



2018 Young Achiver Award recipients



2019 CIE/USA-DFW leadership team



#### 2019 CIE/USA-DFW Celebrations

#### CIE Night

Chair: Jan Benmard

CIE Night is an event to showcase our appreciation to CIE sponsors and members for investing on us and the community, and to recognize our volunteers for contributing their personal time and providing quality programs. It is part of the CIE annual networking platform to bring together people, communities, and programs. In addition, continuing a new tradition started in 2017, outstanding volunteer award was presented to Ms. Alice Yang for her sustaining contributions to CIE/USA-DFW Chapter.

Around 110 guests attended CIE Night. The event included CIE team introduction, performance by high school students, raffle prize drawing donated by sponsors, and fun interactive games. It was a relaxing and laughter-filled event.

Our sincere thanks to Cathay Bank, Capital One, and Altair for their donation of raffle prize. Also thanks to several individuals for their generous donation to support the event.



Altair Regional Manager Hedison Mui (left) and Raffle Prize Winner



Cathay Bank Branch Manager Jenny Gong (right) and Raffle Prize Winner



Texas Instruments SVP Bing Xie (left), 1996 CIE DFW President Thomas Wu, and Kahoot Game Winner



Oncor Electric Delivery Company SVP Mark Carpenter (right) and My Wavelength Game Winners



Dean of College of Engineering of University of North Texas Dr. Hanchen Huang (left) and Raffle Prize Winner



Texas Instruments VP Dr. Jinrong Qian (left) and Raffle Prize Winner



Capital One Senior Manager Amy Shen (right) and Raffle Prize Winner



CIE Night Guests from Texas Instruments



CIE Night Guests from Oncor Electric Delivery Company







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#### 2018 Technical Session

#### Fall Technical Symposium

#### **Chair: Jensen Newman**

On August 18 2018, the CIE-DFW chapter held its Annual Convention and Fall Technical Symposium. This year's symposium theme was: Engineering the Impossible – the Innovative and Integrated Solutions. The symposium had one plenary session and three parallel tracks: Automation and Smart Machines, Advanced Materials and Manufacturing, and Leadership and Career Development.

The symposium opened with the keynote session featuring three distinguished keynote speakers: Xiaolin Lu, TI Fellow, Director of Kilby Innovation Lab, Texas Instruments; Dr. Michael Fripp, Distinguished Engineer, Halliburton; and Atul Thatte, Director of the Advanced Business Analytics group, TXU Energy. Xiaolin Lu spoke on security issues related to IoT through the presentation ""Last Mile Security in Connected Sensor Applications". Dr. Michael Fripp's presentation on "Dissolvable Fracturing Tools: How to turn a terrible material into a great product" was informative and insightful. Atul Thatte closed the session with a presentation on "Advanced Analytics to Optimize Customer Experience at TXU Energy". About two hundred fifty people attended this plenary session and Dr. Claire Jung, 2018 CIE/USA-DFW Chairwoman of the Board, and Dr. Allan Zhong, 2018 CIE/USA-DFW President, presented appreciation plaques to the keynote speakers. Many people stayed afterwards to talk to the speakers.

The three parallel tracks included the following presentations

#### **Session 1: Automation and Smart Machines**

"Compressive Sensing in Transmission Electron Microscopy: Enabling Experiment and Instrument Automation" by Dr. Andrew Stevens, Machine Learning Engineer, Sivananthan Laboratories

"Blockchain and the 4th Industrial Revolution" by Dr. Simon Mak, Professor of Practice in Entrepreneurship and Associate Director, SMU

"New Reinforcement Learning Structures for Feedback Control and Multi-player Games Applications to Distributed Energy Microgrids, Robotics, and Communication Graphs" by Dr. Frank Lewis, Moncrief-O'Donnell Endowed Chair and Head, Advanced Controls & Sensors Group UTA Research Institute (UTARI), University of Texas at Arlington

Session 2: Advanced Materials and Manufacturing "The Art of Possible - – Innovation at the AT&T Foundry" by Craig Lee, ATT Plano Foundry Director, AT&T

"Polysulfide Thermosets for Flexible Displays" by Dr. Adrian Avendano, Chief Product Officer, Ares Materials

"Tough, strain-tolerant photopolymers for high-throughput additive manufacturing" by Dr. Walter Voit, Founder and CEO, Adaptive 3D

Session 3: Leadership & Career Development

"Inclusive Leadership Skills that will help you effectively adapt to change and navigate your career" by Kim Cummings, AVP HR & Diversity, BNSF Railway

"How to thrive in Corporate America as an Asian American" by Dr. Chee Ching, Vice President, Automation, Technology & Development, AT&T

"Personal Brand" by Conrad Chun, Vice President of Communications, Boeing Global Services

After all the speakers gave their presentation, a panel discussion was conducted at the end of each track. Attendees raised many great questions during the discussions.

Dr. Claire Jung and Dr. Allan Zhong presented appreciation plaques to all the distinguished speakers for their contributions to the symposium. The symposium ended with a raffle prize drawing and more discussion between attendees and speakers in a less formal setting.



## **2018 Technical Session**



Symposium speakers with Dr. Jung and Dr. Zhong



Xiaolin Lu giving keynote speech



Keynote Speaker Dr. Michael Fripp



Keynote Speaker Atul Thatte



Panel discussion on Automation and Smart Machines



Panel discussion on Advanced Materials and Manufacturing



Panel discussion on leadership and career development



# **2018 Technical Session**CIE/USA-DFW Orientation

Chair: Simon Chang

The 2019 CIE Orientation was held at CIE/USA-DFW office on Sunday, December 9<sup>th</sup>, 2019. The goal was to present an overview of CIE/USA-DFW to new board members, new officers, new program chairs, and new members. It also provided an opportunity for all of us to know each other in person.

The orientation included a brief introduction on officers' roles, goals and plans, CIE history and vision, bylaws, networking session and team building activities. Over 30 people attended the orientation.



Scenarios role play at the orientation



2019 CIE officers group photo



CIE Advisor Dr. Faa-Ching Wang presented the vision and strategy



Policy Advisor Sheana Chen presented the bylaws



CIE Board Member Grace Tyler presented a few scenarios for attendees to think about



2018 President Dr. Allan Zhong showcased 2018 achievements



2019 EVP Dr. Lun Tsuei presented his roles and goals for 2019



2019 Convention chair Greg Nichols focused on convention organization



2019 VP Secretary Wen-Shin Wang presented her goals and plans



2019 VP PR Xin Yang presented on how to promote CIE



2019 President Simon Chang presented 2019 plans



2018 VP Youth Programs Tiger Zhou presented his role and plans in 2019





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Science and Technology Division, Taipei Economic & Cultural Office in Houston



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- 3. 協助推動大學生、研究生及博士後等各種雙向台美科技人員培訓及延攬
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- 7. 協助學人團體舉辦學術活動,並針對國內學術研究及科技發展重點,與 服務地區學術團體共同規劃舉辦海外學術研討會
- 8. 協助行政院於服務地區舉辦延攬海外科技人才活動及推動科技部海外人 才歸國橋接方案(LiFT)、博士創新之星計畫(LEAP)、愛因斯坦培植計畫、 哥倫布計畫等人才培育計畫
- 9. 代表國內科技單位出席學術性會議,或蒐集科技相關資訊及撰提研究報告以供參考
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#### Student Engineering and Creativity Competition (SECC)

#### Chair: Min Chu and Simon Chang

CIE/USA-DFW successfully held its new STEM flagship program Student Engineering and Creativity Competition (SECC) on Saturday March 23rd, 2019 at the University of Texas at Dallas (UTD).

2019 SECC was co-hosted by Texas Instruments and UTD. SECC is a new platform for STEM events designed by CIE/USA-DFW Chapter to support national-wide DiscoverE's Engineers Week program to celebrate and raise awareness for: how engineers make a difference in our world, increasing public dialogue on the need for engineers, and bring engineering to life for kids, educators, and parents.

2019 SECC featured an Engineering Challenge (EC)Creativity Challenge (CC), and Science, Technology, Engineering, and Mathematics (STEM) Seminar for students of all grades. The goal is to inspire students to discover and develop their interest in STEM through hands-on projects, developed by our sponsor companies, and creativity challenges to solve engineering problems. Students' interaction with the real world applications is the key element of this platform.

Over 150 people participated in this event, including 12 teams 21 student contestants, their family members, 20 volunteers, 15 judges, STEM speakers, award presenters, and seminar participants.

In the EC competition, students began with a live demonstration of their hands-on project. Students are challenged on one of the following projects: design a unique solution to

the problem of growing food in a space trip, build a battery tester for a single cell alkaline battery, or design a unique solution to the engineering problem of building a growing chamber for an agribusiness company. Students used provided tool kits to build a system, including various sensors, and then control the system via a program written on the calculator that monitors the sensor inputs and outputs. After the demo, students used their poster to showcase their experiment, research, and results. This gives students opportunity to practice their presentation and communication skills.

In the CC competition, students began with an oral presentation of their ideas and solutions to the engineering problems. Students are challenged with ideas to design a plant growing chamber for food to be used for a space flight to Mars, or design a plant growing chamber for genetically modified agricultural plants. After the oral presentation, students used their poster to showcase their research, ideas, and solutions.

In the STEM seminar, Mr. William Yang from PepsiCo R&D gave a talk on STEM in the Consumer Packaged Goods Industry. Mr. Yang used an example of a new potato chip product called Poppables, and the STEM and creativity behind it that made this product a huge success in the very first year. Next, Dr. Jey Veerasamy, Director of Center for Computer Science Education & Outreach at UTD, talked about exciting tools to help learn coding. Dr. Veerasamy gave a live demo on a tool which is interactive and requires little to no programming experience. The demo was fun and drew many laughs from the audience. Lastly, Mr. Rod Wetterskog, Assistant Dean of Corporate Relations in School of Engineering at UTD, hosted an interactive Ideation Workshop with



Engineering Challenge Contestants/Poster



Engineering Challenge Live Demo



Creativity Challenge Contestant/Poster



the audience. The workshop gave a tough challenge to each team comprising the role of a designer, R&D scientist/engineer, manufacturing manager, marketer, and attorney. At the end of ideation stage, where they were tasked with creating potential, each team presented a commercial on their product, product name, what problem does it solve, how does it work, who will buy it, and why will they pick it over other similar solutions. Participants learned a lot from the Ideation Workshop.

The award ceremony started with introduction of two distinguished award presenters, Dr. Faa-Ching Wang and Ms. Laura Chambers. Dr. Wang is Chairman and President of ConsulPath Inc. and founding president of CIE/USA-DFW Chapter. Ms. Chambers is Director of Product Line Management in Texas Instruments. After the award ceremony, a raffle drawing was doncuted. Three lucky winners re-

ceived a TI-Innovator<sup>TM</sup> Hub, a TI-Innovator<sup>TM</sup> Rover, or a TI-Nspire<sup>TM</sup> CX CAS Handheld Calculator donated by our SECC sponsors. 2019 SECC was concluded with the award presentation, where distinguished guests and CIE officers presented trophies and scholarship to seven winners. In addition, seven students received honorable mentions.

2019 SECC was chaired by Dr. Min Chu and Mr. Simon Chang from Texas Instruments. Directors of Logistics were Dr. Tiger Zhou and Ms. Susan Yin. Director of EC competition was Dr. Yang Yang. Director of CC competition was Dr. Lun Tsuei. The program committee and CIE/USA-DFW Chapter would like to express our sincere appreciations to all the volunteers, judges, corporate sponsors (Texas Instruments, Oncor, Huawei, Diodes, BNSF, ConsulPath, and Altair), and prize donors (ConsulPath and Altair) for their contributions to make this event a great success.



Engineering Challenge Live Demo



Engineering Challenge Contestant/Poster



Engineering Challenge Live Demo



Engineering Challenge Live Demo

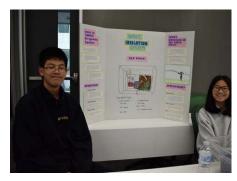


Creativity Challenge Contestant/Poster



Engineering Challenge Live Demo





Engineering Challenge Contestants/Poster



Engineering Challenge Poster Presentation



Creativity Challenge Oral Presentation



Engineering Challenge Live Demo



2019 SECC STEM Seminar



Seminar Speaker William Yang (PepsiCo)



Seminar Speaker Jey Veerasamy (UTD)



Ideation Workshop with Rod Wetterskog (UTD)



**Ideation Workshop Presentations** 



2019 SECC Volunteers



2019 SECC Winners and Award Presenters







CC First Place Winners & Presenter Laura Chambers (TI)



EC Second Place Winners & Presenter Faa-Ching Wang and Laura Chambers



CC Second Place Winner & Presenter Laura Chambers (TI)



EC Third Place Winner & Presenter Faa-Ching Wang and Laura Chambers



EC First Place Winner & Presenters Faa-Ching Wang and Laura Chambers



EC Honorable Mention Winners & Presenter Laura Chamber

#### 2019 CIE/USA-DFW SECC AWARD WINNERS

Winner List of 2019 Student Engineering & Creativity Competition (SECC)				
ing ge	1 <sup>st</sup> Place (Trophy + Scholarship)	Justin Li	ole ns )	Joseph Maldjian, Ani Maldjian, Andre
Engineering Challenge (EC)	2 <sup>nd</sup> Place	Shashank Iswara,	Honorable Mentions (Medals)	Maldjian, Raphael
ngii Tha	(Trophy + Scholarship)	Samarth Kamat	Jen Mer (Me	Maldjian, Garrett Fusfield
En	3 <sup>rd</sup> Place (Trophy + Scholarship)	Jackson Aarseth # Z		Aaron Liu, Alan Zhao
rity nge )	1 <sup>st</sup> Place	Joseph Maldjian,	ıble	NONE
Creativity Challenge (CC)	(Trophy + Scholarship)	Ani Maldjian	ora	
	2 <sup>nd</sup> Place (Trophy + Scholarship)	Garrett Bell	Honorable Mentions	NONE



#### MathComp/MathFun

#### Chairs: Tiger Zhou and Dr. Sean Luo

CIE/USA-DFW successfully held the 30th annual Math-Comp/MathFun on Saturday, June 1st, 2019 at Collin College, Spring Creek Campus. The MathComp/MathFun is the flagship youth program of CIE/USA-DFW, featuring a math competition for students from first through eighth grade, a parenting seminar, and a math fun fair. The goal of the program is to help students discover and develop their interest in Science, Technology, Engineering and Mathematics (STEM). This year's event attracted close to 1,000 people participating from the Dallas-Fort Worth Metroplex area, including almost 300 contestants, their family members, educators, MathFun supporters, and volunteers.

While the contestants were taking the test, their parents and guests attended the parenting seminar and panel discussion. Mathew Tovar served as the Master of Ceremony and moderator for this session, with three panelists. Dr. Jianzhong Su, Professor and Chair of Mathematics at University of Texas at Arlington, Jett Wang, senior at Plano West Senior High and incoming 2019 MIT freshman, and Richard Luo, senior from Highland Park High School. Jianzhong Suis an applied mathematician with expertise in computational neuroscience and partial differential equations. He is an experienced researcher, educator, and administrator. Jett Wang has been active in high school math contests and qualified for the 2019 USA Mathematical Olympiad (USAMO) team. He is also 2018 USA Physics Olympiad Bronze Medalist. Richard Luo will attend Harvard in the fall 2019. After the speeches, the panel discussion drew many interesting questions from the audience. The topics ranged from how to stimulate students' interests in Math, to how/whether a nation's emphasis on STEM would help industrial innovations. The parenting seminar and panel discussion was such a huge success, the moderator had to remind the parents their children had finished the tests and the MathFun fair already started in order to end the session.

After the math test, the students rushed out of the classrooms and enthusiastically participated in MathFun, an interactive activity designed for students to broaden their critical thinking skills and learning to apply mathematics in real life. The MathFun included math puzzles, brain teasers, science games, chess, electric circuits, and robotics demonstrations. Participants earned points from solving problems and winning games for the exchange of prizes. Everyone was impressed with the look of excitement and joy on the participants' face. Thirteen (13) MathFun sponsors participated this year. They were, in no particular order, CIE, Texas Instruments, Oncor, IdeaMath, Dallas Modern Chinese Language School, Magic Math Plano, Dallas Youth Volunteer Association (DYVA), UT Dallas Chess Program, Tiger Team Education, Front Line Youth in STEM, Girls In Stem, 31 Realty and Texas Dragon Toastmasters Club.

The award ceremony started with an opening remark by Simon Chang, President of CIE/USA-DFW. The award ceremony reached its end when the award winners were announced. The sponsor representatives and CIE board members presented trophies to 48 winners. In addition, 50 students received honorable mentions. The award ceremony concluded with a lucky drawing, where 3 students received one fashion electronics and two \$50 gift-card awards.

2019 CIE MathComp/MathFun was chaired by Dr. Tiger Zhou and Dr. Sean Luo. The Master of Ceremony was Yanping Chen. The program committee and CIE/USA-DFW would like to express our sincere appreciations to all the volunteers and corporate sponsors (Texas Instruments, Oncor, Huawei, Cindi's New York Delicatessen, Diodes and BNSF) for their contributions to make this event a great success.





1st Grade winners and presenter Spencer Hu, Texas Instruments



3rd Grade winners and presenter Dr. Allan Zhong, CIE Board Chairman



5th Grade winners and presenter Grace Tyler, CIE Board of Director



7th Grade winners and presenter Dr. Xinfen Chen, CIE Board of Director



2nd Grade winners and presenter Anh Vo, Cindi's NY Deli



4th Grade winners and presenter Kim Cummings, BNSF



6th Grade winners and presenter Jacob Schroeder, Oncor



8th Grade winners and presenter Dr. Qing Zhao, CIE Board of Director





CIE/USA-DFW President Simon Chang



MCMF program chairs Tiger Zhou and Dr. Sean Luo



Master of Ceremony Yanping Chen



Parenting seminar moderator



All winners



MathComp/MathFun volunteers



CHINESE INSTITUTE OF ENGINEERS USA-DIV Chapter 美洲中國工程研學會

Parenting seminar speakers and panelists: Dr. Jianzhong Su, Richard Luo and Jett Wang



Award ceremony



Award ceremony



Parenting seminar and panel discussion



Parenting seminar and panel discussion





#### 2019 CIE/USA-DFW MathFun Fair













#### 2019 CIE/USA-DFW MathComp/MathFun Award Winners

ge		OL 1			
<del></del>	1st	Shaheem Samsudeen	4th	Lillian Ye	
1st Grade	2nd	Yifei Mei	5th	Harry Yang	i
	3rd	Brihasa Veduru	6th	Andrew Li	İ
o	1st	Daniel Zhou	4th	Muze Dai	
2nd Grade	2nd	Michael Johnson	5th	Madeline Xing	
	3rd	Joshua Shu	6th	Ching-Ching Zhong	
е	1st	Bryan Kuang	4th	Andy Li	
3rd Grade	2nd	Jiayan Wang	5th	Tim Csallner	
0	3rd	Prajit Saravanan	6th	Surya Rebbapragada	ည
Φ	1st	Katie Ma	4th	Dylan Tran	Mentions
4th Grade	2nd	Keshav Anand	5th	Chenrui Mi	] ∳
Ю	3rd	Leo Li	6th	Claire Wu	
	1st	Kayden Zhong	4th	Aaron Kuang	Honorable
5th Grade	2nd	Harini Venkatesh	5th	Hayden O	2
u9 G	3rd	Edward Mou	6th	Eric Qian	] <u>¥</u>
Je	1st	Jonathan Wang	4th	Andrew Li	
6th Grade	2nd	Matthew Xie	5th	Richard Jeong	
	3rd	Andrew Yu	6th	Audrey Perry	
de	1st	Aaron Zhou	4th	Chenxi Zhang	
7th Эrac	2nd	Kevin Lu	5th	Kevin Wang	
)	3rd	Max Yin	6th	Ethan Hao	
Ф	1st	Otto Beall	4th	Alex Cheong	
8th Grade	2nd	Nikitha Thoduguli	5th	Pulkith Paruchuri	
G	3rd	Kevin Liu	6th	Shriya Bhat	
7th Grade	3rd 1st 2nd 3rd	Andrew Yu Aaron Zhou Kevin Lu Max Yin	6th 4th 5th 6th	Audrey Perry Chenxi Zhang Kevin Wang Ethan Hao	

Emily Wu, Avahan Gautam, Avni Gautam, Ally Jin

Karen Li, Melody Jing, Nathan Liu, Justin He

Evan Tsai, Devin Li, Eric Liu, Hamza Ghazi, Samuel Li, Himani Patadia, Calvin Jiang, Aiden Shan, Jacob JT Yang, Amber Lin, Vivinsha Veduru Lucas Wu, Bryce Chua, Kaichen Guo, Jeffrey Xu,

Yeening Yap, Alexander Zhao, Franklin Wu, Andy Lee

Michael Yang, David Liu, Ethan Poon, Ekam Kaur, Krish Goudar, Shutian Jiang, Arun Rebbapragada, David Hu, Kevin Hong, Sarah Johnson, Brice Jiang, Grace Jiang

Jessie Wang, Joshua Ye, Ethan Feng, Yash Goudar, Ellen Li, Alan Huang, Jason Ma

Jason Xie, Alysa Zhao, Randy Gu

Brian Zhou



#### Chinese Youth Speech Contest

Chair: Wang Li

The 9th North Texas Chinese Speech Contest was sponsored by CIE/USA-DFW and organized by the North Texas Chinese Culture Promotion Association (NTCCPA). It was held at the University of Texas at Dallas (UTD) on Saturday, April 20th.

This year's speech contest received strong support from 70 public and private schools in the North Texas area. The contest attracted 198 students from Pre-K through Grade 12,

in which over 40% of the contestants originated from non-heritage families. The contest was judged using Toastmaster International rules administered by Mrs. Grace Tyler, chief judge. Mrs. Tyler organized the rules and provided training to the judges to ensure a fair and balanced competition. Prior to the contest, a free speech skill training session was given by Mrs. Sandra Dennis, an experienced ISD teacher, Mrs. Dallena Nash, an experienced ISD teacher, and Dr. Jiang Li, the founder of Five Star Speech Academy. Sixteen committee members, along with more than 80 volunteers, supported this event.

Group / Grade	1st Place	2nd Place	3rd Place
A1: PreK-K	Hannah Wu	Sophia Mao	Kaden Yan
A2: PreK-K	Jade Chen	Riley Zhang	Karol Chow
A3:1st	Jennifer Regal	Yifei Mei	Chloe Li
A4:1st	Harry Yang	Mason Xiao	Kristen Chen
A5:2nd	Melody Jing	Jason Chen	Kenny Yue
A6:2nd	Emily Bo	Ethan Pi	Ginny Kam
B1:3rd	Emily Chen	Lucas Sun	Eric Tang
B2:4th	Luffy Li	Leo Li	Esther Zhou
B3:5th	Kaitlyn Fan	Lexing Wei	Brad Bai
C1:6-8th	Erin Yuan	David Guo	Iris Wang
C2:6-8th	Amy Wang	Tommy Zheng	Shine Sun
D1:9-10	Grace Wang	Ashley Pan	Victor Tsao
E1: K-1st	Frank Alexander	Annie Jiang	Eva Jasso
E2:2nd	Jackson Ervin	Keeli Richardson	Nancy Hernandez
E3:3rd	Sophie Chen	Julian Gatje	Shelbie Livingston
E4: 4-5th	Sophia Kidwell	Millie Petris	Veda Kumar
E5: 6th	Mason Chow	Aiya Sharp	Noah Sharp
E6:7th	Warner Hartnett	Madeleine Wigent	Viviana Quiros Velazquez
E7: 8th	Isabel Martinez	Rishab Siddamshetty	Spencer Simon
F1:9th	Brock Williams	Saara Bidiwala	Trevor Ullmann
F2: 10-11th	Julian Jaramillo	Shiv Yajnik	Caitlin Huisman



CSC Chief Judge Ms. Grace Tyler at the contestant briefing



Chinese Speech Contest (CSC) committee members





#### DFW Youth English Speech Contest

#### Chair: Jan Benmard

The 2019 DFW Youth English Speech Contest was held on Saturday, June 29, at the University of Texas at Dallas. This event served to promote interest in public speaking, provide a platform for participants to demonstrate their speaking skills, foster participants' self-confidence, and recognize participants' talents to inspire others. One hundred and eleven students from 1st to 12th grades registered for this event. Over 200 family members and friends, plus nearly 100 event volunteers, were there to support them.

During the contest, students spoke on a variety of topics including their vacations, hobbies, challenges, and environmental issues. These speeches were greeted with appreciative smiles and applause from the audience. Contest chair Ms. Jan Benmard and members of the contest steering committee worked for months to make the contest fair, fun, and successful. Chief Judge Ms. Jenny Hoch, a Distinguished Toastmaster, recruited 18 highly experienced contest judges, all of whom are members of Toastmasters International.

In addition, Mr. Minkai Wu, 3rd place winner at the 2019 Toastmasters International Speech Contest at the Plains Di-

vision level, gave an inspirational speech at the award ceremony. The participants were excited and encouraged by Mr. Wu's speech "I See Potential in You", where he talked about how the power behind those inspirational words, which motivated him to encourage others in life.

The contest was hosted by the Chinese Institute of Engineers/USA–DFW Chapter, organized by volunteers from the Texas Dragon Toastmasters Club, and sponsored by Oncor, The University of Texas at Dallas-Confucius Institute, Texas Instruments Chinese Initiative, Cindi's New York Deli and Bakery, and 31 Realty Property Management. Cindi's kindly provided breakfast for the volunteers.

The contest committee was proud to organize an event that encouraged students' interest in public speaking. Before the competition, the committee also held public speaking workshops on June 8 and June 15. Over 200 students and parents attended the workshops, which covered how to organize a speech in a clear, logical manner, use vocal variety to capture the audience's attention, effectively deliver one's message, and incorporate gestures to emphasize key points.

Grade	1st Place	2nd Place	3rd Place	Honorable Mention
1st-2nd	Olivia Zhang	Aiden Ji	Mitra Amin	Albert Gong, Elizabeth Sun, Isabella Wei
3rd	Melissa Zhou	Madeleine Chi	Emily Chen	Audrey Carpenter, Nichole Larsen
4th	Emma Wei	Angela Zhou	Jenna Li	Anika Varadharajan, Claire Yin, Jenny Chu, Jeremy Wang, Nicholas Huang
5th - 1	Kaitlyn Fan	Aryan Joshi	Alice Chi	Andy Li, Andrew Sun
5th - 2	Victor Xu	Harini Venkatesh	Vedant Sundar	Alexander Yu, Kepan Wang
6th	Prisha Bhat	Yash Goudar	Kevin Xiang	Xinke Wang
7th	Kimberly Zhang	Tanya Devireddy	Eve Yang	Kavyasri Ramaswamy Eswaramoorthy, Vincent Wu
8th	Madhalasa Iyer	Xinpei Wang	Advika Varadharajan	Shriya Bhat, Aditi Amin, Hardik Singh
9th-12th	Cedric Zhou	Derek Zhang	Emily Zhong	Tushar Sunkum, Ellen Sun, Grace Cao







Volunteers' photo



#### Community Youth Leadership Camp (CYLC)

#### Chair: Shannon Chen

CIE/USA-DFW Chapter sponsored the Community Youth Leadership Camp (CYLC) hosted by Hai-Hwa Foundation on July 15th through the 20th at Texas A&M University-Commerce University. Four hundred and fifty students, teachers, college students and volunteers attended the weeklong program. The theme for this year's camp was "Grit."

CYLC's ongoing mission is to provide direction, leadership, and guidance for aspiring American youth. The week ended with an exciting closing ceremony which included outstanding performances by all participating teams. The participants made films, highly coordinated dance routines, and clever skits reflecting the knowledge gained during the program in front of a 1500-member audience. The reception from the audience was well received.

















# **2019 Youth Programs**DFW Chinese Youth Camp

#### Chair: Ting Whai Lee

CIE/USA-DFW sponsored another successful youth event, 2019 DFW Chinese Youth Camp (CYC), which was held on June 30th through July 6th. Over two hundred fifty campers from age eight to sixteen participated in the summer camp activities and were supported by forty-two counselors and assistant counselors of ages fifteen to eighteen.

One teacher, sent by the Overseas Community Affairs Council of Taiwan ROC, another teacher from Taiwan, and two local teachers taught Chinese folk dance and Chinese folk activities. The dances included flowers, ribbons, fans, and more. Campers enjoyed learning various tricks with the Chinese yo-yo in folk activities. In addition, CYC had several local teachers teach classes such as art, street dance, APAA (Asian Pacific American Advocates), health, Kung-Fu, Chinese calligraphy, Chinese painting, STEM, etc.. In APAA, they learned important skills like being an advocate and

leader in the community, developing their critical skills, and the difference between equity and equality. In STEM, the students enjoyed challenging themselves by making a catapult with limited supplies while learning about STEM (science, technology, engineering and mathematics) like projectile motion. Campers also brought many souvenirs home such as prizes from the Thursday's evening Night Market, watercolor paintings, and Chinese calligraphy writing.

The 2019 DFW CYC ended with a wonderful and exciting closing ceremony presented by the campers and counselors. Parents were highly impressed by the performances and with the progress made by their children during the camp week. They saw how their children developed and grew from the camp experience, and through the performances, they could see how their children made memories and lasting friendships.

We are all a huge CYC family, and we cannot wait to see everyone come back next year!









The purpose of CYC is to educate Chinese culture to the youth in the Dallas area, to build lasting friendships and memories, and to provide leadership training and opportunities.



# Student Engineering and Creativity Competition (SECC) Workshops

#### SECC Hand-on Workshop (January 19-20, 2019)

Over 80 students attended this free pre-competition handson workshop. As part of the 2019 SECC (Student Engineering and Creativity Competition), this workshop was designed for students of ALL grades who want to see the demonstration of an actual SECC competition project, or just to practice how a program written on a calculator controls attached hardware & sensors via a TI-Innovator hub. Students were encouraged to bring their own TI-Innovator Hub and TI calculator and practice at this workshop, or ask the instructor questions. Two sessions were available to give students flexibility.

Instructor was Mr. Fred Fotsch, a STEM expert. Mr. Fotsch has 28 years of teaching experience in STEM education and computer programming at public schools. Fred is the STEM Education Manager at Texas Instruments.

#### SECC Competition Prep Workshop (February 17, 2019)

The purpose of this workshop was tailored to tutor SECC contestants on building the Engineering Challenge (EC) project and to prepare for the SECC competition on March 23, 2019.

This was a tutoring workshop, not an instructor-led workshop, and was designed for SECC contestants. Focus was to give students opportunity to build the project from scratch, ask questions, and get help from the tutor. Students were required to bring their own TI-calculator, TI-Innovator Hub, and tool kits required for the registered competition topic.



Pre-competition hands-on workshop (Session-2)



Students at hands-on workshop asked questions (Session-2)



Pre-competition hands-on workshop (Session-1)



Parent helped students at pre-comp hands-on workshop

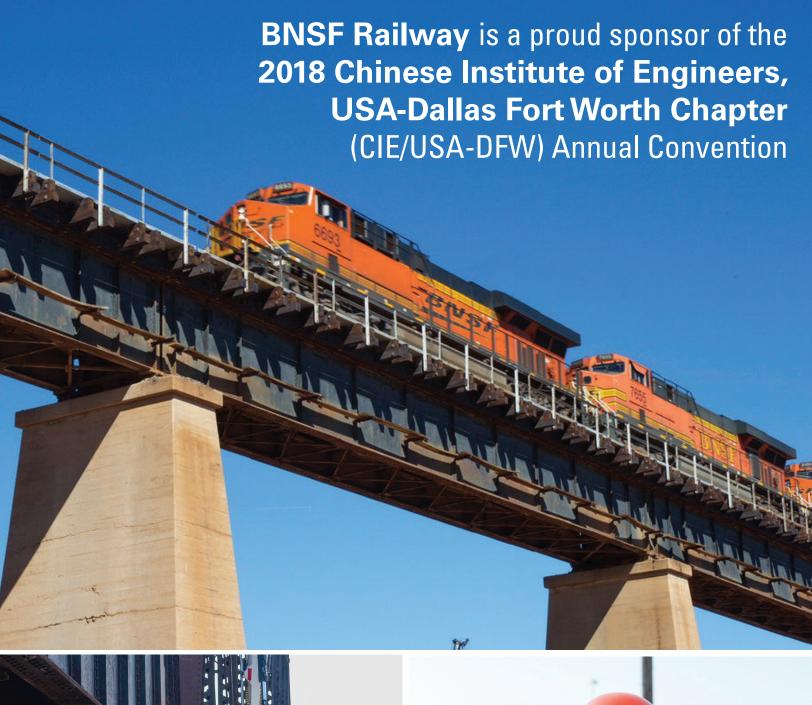


Parent helped student at pre-comp hands-on workshop



Parent and student worked together at hands-on workshop











#### **About AAEOY**



#### Asian American Engineer of the Year

AAEOY stands for Asian American Engineer of the Year award, an annual recognition event on the national platform to honor the most distinguished professionals with their leadership, technical achievements, and remarkable public services. As a part of the National Engineers Week (DiscoverE) Program, AAEOY was first introduced in 2002. This event has since become a prestigious and important forum for Corporate America, Academia, and Government entities in promoting STEM (Science, Technology, Engineering & Mathematics) activities.

Since 2002, hundreds of Asian-American professionals from leading US corporations, prestigious research institutions, as well as the US Armed Forces, have been selected as

the recipients of this prestigious Award. The past awardees included Nobel Laureates, academia, key corporate executives, and astronauts.

Besides recognizing outstanding Asian American engineers and scientists from across the country, special Distinguished awards were also created to honor and celebrate the achievements of Asian Americans for their global stature and influence. These awardees have served as role models and a source of inspiration for the STEM community. Many internationally known individuals have received these distinguished awards at the AAEOY events since 2002.













## **2019 AAEOY Sponsor List**



## Diamond and Platinum Sponsors

# The Boeing Company Idaho National Laboratory Texas Instruments Incorporated

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AT&T
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Fueled by your thinking, the CST-100 Starliner will usher in an era of commercial human space travel. Join us and see how far we can go together.

Congratulations to the Boeing awardees of the AAEOY 2019.

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#### **About CIE**

#### Mission

Chinese Institute of Engineers (CIE/USA) is dedicated to promoting engineering and scientific excellence, professional advancement and leadership development of Asian-Americans.

#### History

The Chinese Institute of Engineers was founded in 1917 in New York by a group of Chinese engineers who graduated from American universities and served in various industries in the United States. The main organization moved back to China during World War II, then moved to Taiwan. The American counterpart became a separate chapter. In 1977, the institute was renamed the "Chinese Institute of Engineers, USA (CIE/USA)," with a mission to serve members from all over the United States. Since then, seven area chapters, namely the Greater New York, San Francisco-Bay Area, Seattle, Dallas-Fort Worth, OCEESA, New Mexico, and South CAL chapters have been established.

CIE/USA works with other professional organizations to sponsor events, such as venture capital and management seminars, technical conferences, and high-tech exhibitions, and to promote joint interests and partnership in technology among the US, China and Taiwan. CIE/USA also co-sponsors the Sino-American Technology Engineering Conference (SATEC) in Beijing and the Modern Engineering and Technology Seminars (METS) in Taipei every other year.

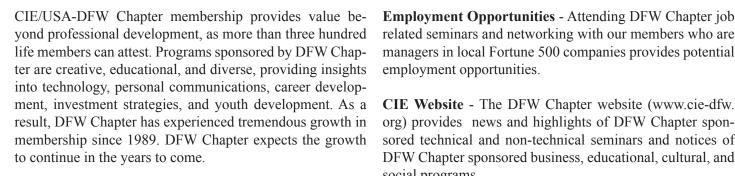
#### CIE/USA-DFW Area Chapter

The Dallas-Fort Worth Chapter was established in January, 1989 and registered in the state of Texas as a non-profit organization in 1992. Over the years, the CIE/USA-DFW chapter has established close ties with major corporations and government bodies around the world. Leaders from these sponsoring organizations highlight every year's convention by sharing their experience and insight in business and technology at our evening banquet.

## **Membership Drive**

#### Welcome!





#### **Benefits of CIE/USA-DFW Chapter Membership**

**Technical Advancement - DFW Chapter provides firsthand** and first class technical information through our members' affiliation with high-tech industries in the global market and international business.

Networking Opportunities - Attending DFW Chapter sponsored seminars and social activities within each technical group provide abundant networking opportunities.



CIE Website - The DFW Chapter website (www.cie-dfw. org) provides news and highlights of DFW Chapter sponsored technical and non-technical seminars and notices of DFW Chapter sponsored business, educational, cultural, and social programs.

**Special Discounts - DFW Chapter members enjoy discounts** on attending the DFW Chapter annual convention and DFW Chapter sponsored events and activities. Discounts are provided by our sponsors and vendors.



#### 2019 CIE/USA National Council

#### Natioal Council Officers National Council Advisors

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Wei-Ping Pan

#### Chapter Representatives

Dallas/ Fort Worth		Greater New York		San Francisco Bay Area	
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Xinfen Chen	陳信芬	C. Eric Wu	吳振籓	Simon Ma	馬思平
Grace Tyler	蔣金玉	Kun-Lung Wu	吳坤龍	Andrew Fang	方自遠
Simon Chang	張永山	Monsong Chen	陳孟松	David Fong	方玉山
Qing Zhao	趙慶	Yuying Gosser	仇玉英	Bill Kao	高耀京
<u>New</u>	<u>Mexico</u>	South CAL		<u>Seattle</u>	
Yifeng Wang	王益峰	Bing Liang Neris	梁冰	Xiaoxi Wang	王曉熙
Qianyan Zhang		Mabel His		Jenny Chang	
Yung Sung Cheng	鄭永松	Chuching Wang		Yong Zhou	周雍
<u>0C</u>	EESA	Gorden Wei		Gina Li	李建平
Yung Sung Cheng		Tony Torng	佟儀	Minggan Ma	馬明罡
Kaimin Shih	施凱閔	Wei Li	李偉	Angelina Huang,	

## 2019 CIE/USA-DFW Officers, Board and Advisors

## Executive leadership Team Board of Directors

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Allan Zhong	鐘曉光	Joel Austin	
Simon Chang	張永山	Simon Chang	張永山
Lun Tsuei	崔倫	Sheena Chen	陳欣儀
Greg Nichols		Kim Cummings	
Wen-Shin Wang	王文欣	Shengli Fu	傅勝利
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Xin Yang	楊鑫	Chris Koh	
Tiger Zhou	周细根	Simon Mak	
Susan Yin	胡祝平	Jin Zhao	
Kevin Liang	梁子傲	Lun Tsuei	崔倫
Sandy Xu		Allan Zhong	鐘曉光
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Min Chu	
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Tiger Zhou	周细根
Sean Luo	羅湘
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Programs		Performance Director	r
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Jinhong Liu	劉金紅	Greg Nichols	71.124 1.1
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