## 2020-2021 ASIAN AMERICAN ENGINEER OF THE YEAR AWARD AND CONFERENCE

AAEOY

(2)

## JULY 17&18, 2021 VIRTUAL EVENT



Chinese Institute of Engineers/USA 美洲中國工程師學會

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### **2020-2021** ASIAN AMERICAN ENGINEER OF THE YEAR **AWARD AND CONFERENCE**

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Chinese Institute of Engineers/USA 美洲中國工程師學會

### **Opening Remark**



Raymond Y. Chen Chairman, AAEOY National Council President of CIE-SF t is my pleasure to welcome everyone to the 2020-2021 Asian American Engineer of the Year Award and Conference Program. This is an annual event on the national platform to honor the most distinguished Asian American professionals for their leadership, technical achievements, and remarkable public services.

AAEOY was first introduced in 2002 by CIE/USA as part of the National Engineers Week program. Among the hundreds of events held by CIE/USA every year, AAEOY is the flagship program where CIE/USA local chapters take turns hosting this annual event across the nation. This year's program is organized by the CIE San Francisco Bay Area chapter, where I am proud to be the president and lead a team of dedicated volunteers.

In the past twenty years, AAEOY has awarded over 300 Asian Americans in various fields of science and engineering, including: 9 Nobel Laureates, many academic/university scholars, major corporate executives, a couple cabinet members, and even an astronaut! There are promising young engineer awardees, as well as distinguished achievement awardees with global stature and influence who all serve as role models and sources of inspiration. Please check out aaeoy.org to know more about them.

Though AAEOY 2020 was postponed due to the pandemic, the organizing committee has continued to host activities to stay engaged with the community. In August 2020 we held an Executive Forum for the AAEOY awardees. In December 2020, January and May 2021, we had the AAEOY Speaker Series, inviting past awardees to share their technical outlooks and career stories with our audiences. And in June, a first time nation-wide AAEOY online career fair was piloted to help engineers and students better prepare for the job market after the pandemic. More than 650 LinkedIn resumes were received for the 2-hour event and many participants enjoyed the interactions with company talent acquisition experts and our excellent panel of speakers. The July 17 pre-award gala was a great online networking event to connect all awardees, participating entities, committee members and important guests. Our volunteers crafted a unique online venue specifically designed for this event: with a ballroom, stage with red carpet walkway, tables with seating arrangement, many interactive exhibitions of awardees, sponsors and documentaries, welcome stations, a photo booth, a signing wall, etc. July 18 will be the main event where we will live stream the 19th AAEOY award ceremony at AAEOY and YouTube web portals in honor of the achievements of our awardees. On July 31, we will organize another Virtual Career Carnival with a theme of "How to thrive in your job?", so please check out AAEOY web site, join our events, and support our programs.

On behalf of the AAEOY committee, I would like to express our sincere gratitude to our current and past sponsors, alliance partners, supporters, and volunteers. As a non-profit organization, we all do this without pay. Our esteemed speakers, HR and talent acquisition experts, and organization team spend a great amount of personal time to produce quality programs that are beneficial to the community. We hope to continue encouraging fellow engineers to achieve technical excellence, advance their leadership skills and to join us as volunteers to give back to the community. We hope that the outstanding accomplishments and contributions of these Asian American Engineers are known and we want to pass the torch to the next generation.

Thank you.

### *Raymond Y. Chen* AAEOY National Council Chair | President of CIE-SF July 18, 2021

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### 2020~2021 AAEOY Executive Committee Chair's Remarks



Brian Pan Chairman, AAEOY Executive Committee

On behalf of the AAEOY committee, I would like to welcome all the distinguished guests, the awardees, sponsors, alliance partners, and all of you who participate in this 19th AAEOY Award and Conference.

AAEOY Award and Conference is a national event, supported by all 7 chapters of CIE/USA. Traditionally, the Conference is filled with activities including technical/cultural tour, pre-award dinner, executive forum, career fair/company exhibition, VIP networking reception, and a delightful banquet ceremony to recognize and celebrate the achievements of the awardees.

Due to the uncertainties and restrictions of the pandemic, the host CIE/USA SF Chapter had to postpone 2020 AAEOY to 2021 and integrated both years' conferences. The 2020-2021 Award and Conference has been transformed into a series of online activities yearround including Executive Forum, Talent Meet-up/Career Fair, Speaker Series, Pre-award VIP Gala, and the Award Ceremony.

Thanks to the advancement of technology which enables the virtual conference, more people are able to celebrate with us across regions conveniently. It is amazing that what can be done online is much more than expected.

It has also been very rewarding to serve for this event, to interact with, and to learn about the awardees. I was truly inspired by their continuous efforts. They are all devoted to their roles as people, as leaders, and as contributors to their organizations, serving as role models for the society.

Congratulations, 2020-2021 AAEOY recipients. This award records not only your accomplishments but, even more importantly, your dedication to the Asian American community.

I want to thank the sponsors, the local communities, and all the volunteers for their support and participation.

Finally, we cannot approach the end without thanking the Executive Committee members. I really appreciate your dedicated efforts to make this event a success.

Sincerely yours,

Brian Pan AAEOY Executive Committee Chair





### OFFICE OF THE GOVERNOR

July 18, 2021

### Asian American Engineer of the Year Award and Conference

On behalf of the State of California, it is my pleasure to commemorate the 2020-2021 Asian American Engineer of the Year (AAEOY) Award and Conference.

Since 2002, AAEOY has been an important voice in recognizing the outstanding Asian American professionals who have made exceptional contributions to the fields of engineering and science. Asian American scientists have been foundational to making critical advancements in STEM and represent not only the importance but also the strength of a diverse workforce.

I thank the AAEOY planning committee for their work putting this ceremony together and the Chinese Institute of Engineers/USA San Francisco Chapter for hosting this event. This award and the many development programs put on by this body go miles in advancing opportunities for new and burgeoning Asian scientists, engineers, and leaders alike.

Please accept my best wishes for a successful ceremony.

Sincerely,

Gavin Newsom Governor of California

GOVERNOR GAVIN NEWSOM • SACRAMENTO, CA 95814 • (916) 445-2841





### ELENI KOUNALAKIS LIEUTENANT GOVERNOR

July 18, 2021

Chinese Institute of Engineers/ USA San Francisco Bay Area Chapter P.O. Box 2880 Cupertino, CA 95015

Dear Friends,

It is my pleasure to welcome you to the 2021 Asian American Engineer of the Year (AAEOY) Awards and Conference to be held in San Francisco, California on July 18<sup>th</sup>, 2021.

I would like to take this opportunity to commend the AAEOY for its commitment to honoring outstanding Asian American Professionals in areas of science and engineering for their technical achievements, leadership, and public service.

It is an honor to welcome your organization to the State of California, Thank you for your continued work in science and engineering. Congratulations to all those being recognized for their achievements.

Sincerely,

Ambassador Eleni Kounalakis (Ret.) Lieutenant Governor

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U.S. SENATOR DIANNE FEINSTEIN CALIFORNIA



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United States Senate

July 18, 2021

It is a great pleasure for me to recognize the 2020-2021 Asian American Engineer of the Year (AAEOY) Award and Conference. Since 2002, the AAEOY Conference has annually honored exceptional Asian American individuals in the science and engineering fields, while promoting professional development and leadership skills. The event celebrates the many commendable achievements of Asian American engineers and scientists who serve as role models and provide inspiration for the STEM (Science, Technology, Engineering, and Mathematics) community.

Since its creation, the AAEOY award has been bestowed upon hundreds of outstanding Asian American professionals working in U.S. corporations, research institutions, and the U.S. military. Like previous years, this year's awardees are remarkable individuals who have made significant contributions to our country and across the globe.

As a United States Senator from the State of California, I recognize the importance of the AAEOY Award and Conference, and send my best wishes to the awardees for continued successful and impactful work in the years to come.

Sincerely,

Dianne Feinstein United States Senator

DF: ec

TED W. LIEU 33rd District, California

COMMITTEE ON THE JUDICIARY

COMMITTEE ON FOREIGN AFFAIRS Congress of the United States House of Representatives Washington, DC 20515–0533

July 18, 2021



Dear Friends,

Please accept my warmest wishes and congratulations as you gather for the 2020-2021 Asian American Engineer of the Year Award and Conference.

I commend The Chinese Institute of Engineers/USA (CIE/USA) for their work in uniting our community and building a national network of Asian American scientists, engineers, and other professionals. Since 1917, CIE/USA has not only championed pivotal advancements in science, technology, engineering, and math (STEM), but has also provided a national platform to honor the tremendous achievements of the Asian American community.

I am proud to join CIE/USA in celebrating the remarkable leadership, professional achievements, and public service of distinguished Asian Americans nationwide. The contributions that this community has made to the STEM fields continue to serve as an inspiration to all. Thank you for your hard work and dedication.

Congratulations and best wishes for a memorable event.

Sincerely,

Ted W. Lien

Ted W. Lieu Member of Congress (CA-33)



403 CANNON HOUSE OFFICE BUILDING WASHINGTON, DC 20515 (202) 225–3976

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COMMITTEE ON SMALL BUSINESS SUBCOMMITEE ON OVERSIGHT, INVESTIGATIONS, AND REGULATION SUBCOMMITEE ON ECONOMIC GROWTH, TAX, AND CAPTAL ACCESS COMMITTEE ON THE BUDGET

July 18, 2021

Chinese Institute of Engineers-USA 20651 Golden Springs Drive #296 Diamond Bar, CA 91789

Dear Friends,

I would like to extend a warm welcome to all those who have gathered for the Asian American Engineers of the Year (AAEOY) Virtual 2021 Award Ceremony.

Founded in 1917, the Chinese Institute of Engineers-USA (CIE-USA) is a nationwide organization of Chinese-American engineers and scientists. Since its founding, the CIE-USA has promoted the study and application of science, technology, engineering and mathematics across the United States, while providing multiple opportunities and connections for its members.

I applaud the CIE-USA for recognizing these outstanding professionals during National Engineers Week (DiscoverE) program. This is the culmination to a successful series of celebratory events including a career fair for young engineers, VIP reception, executive forum and speakers series. The Institute's contributions have led to breakthroughs in science and technology, improving the lives of many.

On behalf of the United States House of Representatives and the people of the 27th Congressional District, I offer my best wishes to the CIE-USA and the attendees of the AAEOY Virtual 2021 Award Program.

Sincerely,

udy Chu

JUDY CHU, Ph.D. Member of Congress, 27<sup>th</sup> District









### 2021 Asian American Engineers of the Year Proclamation

April 29, 2021

On behalf of DiscoverE, the premiere engineering outreach organization, I congratulate the 2021 Asian American of the Year Awards recipients. I also send warm wishes for those attending virtually this wonderful and inspiring event.

The Chinese Institute of Engineers-USA has been a valuable DiscoverE partner and coalition member for more than 20 years. This partnership helped spark the AAEOY program, and it has been exciting to watch its continued success. It is critical to recognize those not only leading the way in engineering and technology achievements but also in cultivating future generations.

My best wishes for this exciting and prestigious event.

Sincerely,

Kashy Renzetti

Kathy Renzett, CAE Executive Director DiscoverE

DiscoverE 1602 Belle View Blvd. #343 • Alexandria, VA 22307 • **571-467-0354** (o) • info@DiscoverE.org • www.DiscoverE.org



### 2020- 2021 AAEOY Award Ceremony



|   | Welcome by the Master of Ceremonies                             |
|---|---|
| Opening Remark                                  | Raymond Chen, AAEOY National Council Chair                      |
| Remarks by the National Council                 | Bing Neris, CIE-USA National Council Chair                      |
| Welcome speech                                  | Dr. William Perry   |
|   | Presentation of Awards Part I                                   |
| The Boeing Company                              | Mr. Steven J. Yahata,<br>Asian American Executive of the Year   |
| IBM   | Dr. Mukesh Khare<br>Asian American Executive of the Year        |
| Texas Instruments                               | Dr. Gurshaman Baweja<br>Asian American Executive of the Year    |
| ams   | Ms. Jennifer Zhao<br>Asian American Executive of the Year       |
|   | Presentation of Awards Part II                                  |
| Distinguished Leadership in<br>Technology Award | Ms. Anne Chow, AT&T   |
| AT&T  | Dr. Zhi Li<br>Asian American Engineer of the Year               |
| General Motors                                  | Dr. Shuqing Zeng<br>Asian American Engineer of the Year         |
|   | Dr. Xingcheng Xiao<br>Asian American Engineer of the Year Award |
| Sandia National Laboratories                    | Dr. Bo Song<br>Asian American Engineer of the Year              |
| Naval Air Warfare Center                        | Mr. Cao Nguyen<br>Asian American Engineer of the Year           |
|   | Presentation of Awards Part III                                 |
| Keynote   | Dr. Naveed M. Hussain, Boeing                                   |
| The Boeing Company                              | Mr. Morteza Safai   |
|   | Asian American Engineer of the Year                             |
|   |   |









## 2020- 2021 AAEOY Awardee

### Distinguished Leadership in Technology Award

Ms. Anne Chow

AT&T

### Distinguished Lifetime Achievement Award

Ms. Jensen Huang NVIDIA

### Asian American Executive of the Year

Dr. Gurshaman BawejaTexas InstrumentsDr. Mukesh KhareIBMMr. Steven J. YahataThe Boeing CompanyMs. Jennifer Zhaoams

### Asian American Engineer of the Year

| Mr. Pratik Gupta   | IBM                                |
|--------------------|------------------------------------|
| Dr. Zhi Li         | AT&T                               |
| Col. Dannielle Ngo | U.S. Army Inspector General Agency |
| Mr. Cao Nguyen     | Naval Air Warfare Center           |
| Dr. Khanh D. Pham  | U.S. Air Force Research Laboratory |
| Dr. Bo Song        | Sandia National Laboratories       |
| Mr. Morteza Safai  | The Boeing Company                 |
| Dr. Xingcheng Xiao | General Motors                     |
| Dr. Shuqing Zeng   | General Motors                     |

### Asian American Most Promising Engineer of the Year

Ms. Poonam AggarwalNaval Undersea Warfare Center DivisionDr. Emad AqadDuPont Electronics & ImagingMr. Jacky-Vy ChauThe Boeing CompanyDr. Dong DingIdaho National LaboratoryMs. Indu ShuklaU.S. Army Engineer Research and<br/>Development Center

### Welcome Remark Speaker



Dr. William Perry Former Secretary of Defense

r. William James Perry is an American mathematician, engineer, businessman, and civil servant who was the United States Secretary of Defense from February 3, 1994, to January 23, 1997, under President Bill Clinton. He also served as Deputy Secretary of Defense (1993–1994) and Under Secretary of Defense for Research and Engineering

He is also a senior fellow at Stanford University's Hoover Institution. He serves as director of the Preventive Defense Project. He is an expert in U.S. foreign policy, national security and arms control. In 2013 he founded the William J. Perry Project, a non-profit effort to educate the public on the current dangers of nuclear weapons.

Perry also has extensive business experience and serves on the boards of several high-tech companies. He is a member of the National Academy of Engineering and a fellow of the American Academy of Arts and Sciences. Among Perry's numerous awards are the Presidential Medal of Freedom (1997) and the Grand Cordon of the Order of the Rising Sun (2002), awarded by Japan.

On October 16, 2008, Perry was awarded the Sylvanus Thayer Award by the United States Military Academy. In 1999, Perry was awarded the James A. Van Fleet Award by The Korea Society.

From 1977 to 1981, during the Jimmy Carter administration, Perry served as Undersecretary of Defense for Research and Engineering, where he had responsibility for weapon systems procurement and research and development. Among other achievements, he was instrumental in the development of stealth aircraft technology.

He was director of the Electronic Defense Laboratories of Sylvania/GTE in California from 1954 to 1964, and from 1964 to 1977 president of Electromagnetic Systems Laboratory (ESL), Incorporated, an electronics firm that he founded.

Perry received his B.S. (1949) and M.A. (1950) degrees from Stanford University and a Ph.D. in mathematics from Pennsylvania State University in 1957.

### Keynote Speaker



Dr. Naveed Hussain CTO, Vice President & General Manager Boeing Research & Technology, The Boeing Company

aveed Hussain is the vice president and general manager of Boeing Research & Technology (BR&T), the advanced central research and development unit of The Boeing Company. As a trusted research, technology and technical leader, BR&T develops innovative technologies that break barriers, enabling the development of future aerospace solutions while improving the cycle time, cost, quality and performance of existing Boeing products and services.

Named to this position in 2018, Hussain leads a team of scientists, technologists, technicians and engineers who collaborate with research and development partners worldwide to solve the aerospace industry's toughest challenges. He has oversight of operations at five research centers in the U.S. including Alabama, California, Missouri, South Carolina and Washington, as well as seven international research centers in Australia, Brazil, China, Europe, India, Russia and South Korea.

Prior to this assignment, Hussain was the vice president of Aeromechanics Technology for Boeing. Previously, he led Platform & Networked Systems Technology for BR&T, launched the BR&T – India research center in Bangalore and directed Boeing Defense, Space, & Security Flight Engineering. He holds six patents and joined the company as a Howard Hughes Doctoral Fellow in 1990.

Hussain earned a Bachelor of Science degree from Rensselaer Polytechnic Institute and a Master of Science degree and a Doctor of Philosophy degree from Stanford University, all in mechanical engineering. He also completed a master's degree in business administration from the Wharton School, University of Pennsylvania.



CEO AT&T Business AT&T Communications, LLC

### CITATION

Trail-blazing business leader and technologist who advocates inclusion and diversity in business and technology, and serves as role model for the community



## ANNE CHOW

### **AAEOY Distinguished Leadership in Technology Award**

Anne was appointed Chief Executive Officer of AT&T Business in September 2019. She and her organization of over 30,000 employees are responsible for serving nearly 3 million business customers in upwards of 200 countries and territories around the world, covering over \$36B in revenue. AT&T Business customers span all industries including the public sector as well as nearly all of the world's Fortune 1000 companies. She is the first woman to hold this position and first woman of color CEO in AT&T's history.

With decades in the industry, Anne's experience is diverse in both breadth and depth. She has led many global organizations through major transformations, developing and executing innovative growth strategies while building role model relationships. She's passionate about education, diversity and inclusion, advancing women in technology, cultivating next generation leaders and customer excellence. Previously, Anne was President - National Business, where she led over 12,000 business professionals supporting 95 percent of AT&T's business customers nationwide. Across numerous AT&T Business segments, she oversaw customer experience, management of direct and indirect sales channels, the B2B Sales Development Program, call center support, and DIRECTV for Business<sup>SM</sup>.

As a founding member of AT&T University's governing board, Anne actively supports the company's leadership development imperative. She's also involved in many of AT&T's Employee Groups worldwide and serves as the executive sponsor for AT&T's Women of Business Employee Network and the Asia Pacific Women's Organization. Anne coaches, mentors and inspires thousands of readers through her internal blog, which has been voted "best blog" across the company for the past 9 years.

She currently serves on the Board of the Directors of Franklin Covey Co (NYSE: FC). Anne is a member of the Dallas Mavericks Advisory Council (D-MAC), the Committee of 100, the President's Advisory Board at Georgia Tech, and Co-Chairs the Parents Board at Georgia Tech. She is the co-author of "The Leader's Guide to Unconscious Bias: How to Reframe Bias, Cultivate Connection, and Create High-Performing Teams," an Amazon #1 Best Selling book, published by Simon & Schuster.

Her many contributions to business and the community are widely recognized. A few of Anne's awards and accolades include the Gold Stevie Award as Female Executive of the Year - Business Services, and Future 50: North Texas Innovators and Disruptors You Need To Know and Woman of the Year in Technology by the National Diversity Council. Most recently, Anne was named to Fortune's 2020 Most Powerful Women in Business list and D CEO's 2021 Dallas 500, which features the region's most influential leaders.

Anne holds a Master of Business Administration with distinction from The Johnson School at Cornell University and a Bachelor of Science degree and Master of Engineering degree in Electrical Engineering from Cornell. She is also a graduate of the Pre-College Division of the Juilliard School of Music. She lives in the Dallas/Fort Worth metro area with her husband, two daughters, and their rescued Australian Shepherd.



Founder, President and CEO NVIDIA

### CITATION

A visionary and innovator in parallel computing technology that accelerates the realization of AI computing

## JENSEN HUANG

### **AAEOY Distinguished Lifetime Achievement Award**

Jensen Huang founded NVIDIA in 1993 and has served since its inception as president, chief executive officer and a member of the board of directors.

Starting out in PC graphics, NVIDIA helped build the gaming market into the largest entertainment industry in the world today. The company's invention of the GPU in 1999 made possible real-time programmable shading, which defines modern computer graphics, and later revolutionized parallel computing. More recently, GPU deep learning ignited modern AI — the next era of computing — with the GPU acting as the brain of computers, robots and self-driving cars that can perceive and understand the world.

Huang is a recipient of the IEEE Founder's Medal, the Dr. Morris Chang Exemplary Leadership Award and honorary doctorate degrees from Taiwan's National Chiao Tung University and Oregon State University. In 2019, Harvard Business Review ranked him No. 1 on its list of the world's 100 best-performing CEOs over the lifetime of their tenure. In 2017, he was named Fortune's Businessperson of the Year.

Prior to founding NVIDIA, Huang worked at LSI Logic and Advanced Micro Devices. He holds a BSEE degree from Oregon State University and an MSEE degree from Stanford University.





Senior Vice President and CIO, IT Services Texas Instruments

### CITATION

Development and implementation of critical information technology strategies and roadmaps for semiconductor manufacturing operations that bring significant quality improvements, substantial operational efficiencies, global innovations and cyber security protection



## **GURSHAMAN BAWEJA**

Asian American Executive of the Year

Dr. Gurshaman Baweja is an innovative global leader whose technical contributions have resulted in the development and implementation of critical information technology strategies and roadmaps for semiconductor manufacturing operations.

**Dr. Baweja joined Texas Instruments (TI) in 1996 and is currently** Senior Vice President and CIO, IT Services where he is leading the implementation of several key initiatives focused on manufacturing automation, e-commerce solutions and other key technology implementations. For more than 23 years, he has been providing results in the **high-tech global environment**, **specializing in supply chain**, **manufacturing, information technology, mergers and acquisitions, start-up operations and cyber security**.

Dr. Baweja is the author of four (4) U.S. patent disclosures in the areas of computer integrating manufacturing, constraint management algorithms and manufacturing process control. He is also the author of more than 15 journal and conference publications focused on manufacturing process control and bottleneck tool scheduling algorithms. He earned his Ph.D. at Arizona State University and also holds a Master of Business Administration degree and a Master of Science degree in Industrial Engineering.

Dr. Baweja is currently serving as a member of the University of Texas at Dallas (UTD) Audit Committee, where he is partnering with the University's executive officers to identify compliance risks and review mitigation plans. He has also served as an active member of the Industry Advisory Board for the Information Technology Department at University of Texas at Dallas and a member of the Distinguished Advisory Committee for Engineering Management, Information & Systems Department at Southern Methodist University (SMU). Dr. Baweja also advised the Business School at UTD as they developed a Master's level Data Analytics program.



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Vice President, Hybrid Cloud IBM Research

### CITATION

For his vision, execution and establishment of an industry ecosystem to advance disruptive nanotechnology, benefiting IBM clients with mission critical workloads; and for his instrumental role in creating the world's first multi-billion dollar public-academic and industry partnership to improve the compute efficiency of hardware essential for Artificial Intelligence (AI), with the goal of achieving a significant reduction in energy consumption



## MUKESH KHARE

Asian American Executive of the Year

Dr. Mukesh V. Khare is Vice President at IBM Research, driving IBM's computing hardware research agenda. In his current role, he and his team of more than 1000 researchers worldwide are redefining the future of computing for next generation workloads such as AI, Machine Learning, High-Performance Computing and their collective delivery through the Hybrid Cloud.

Throughout his career, Dr. Khare has helped build and drive collaborative research alliances in the nanotechnology industry to push the state of the art for the systems required to manage today's client smartphone and datacenter mission-critical workloads and chip technologies. He has helped grow the world's most advanced nanotechnology research complex in Albany, NY, with more than \$20B of investment and hundreds of partner companies collaborating for commercial and societal benefits. As a result of these innovations, IBM delivered to the U.S. National Labs the world's most powerful supercomputers (World's #1 and #2), which also served to put the United States back at the top of the world's supercomputing map.

Most recently, Dr. Khare championed the formation of an AI Hardware Center to drive innovations in AI technologies through collaborations with New York State, The State University of New York, Rensselaer Polytechnic University and several leading industrial partners. Collectively, IBM and NYS have committed more than \$2.3B of investment over next five years toward the world's first such initiative of its kind. The AI Hardware center is targeting to improve compute efficiency by more than 10000 time over a decade to sustain energy consumption demands from AI workloads.

Dr. Khare is a recipient of the prestigious IBM Corporate Award, IBM's highest technical award, for his leadership in delivering innovative technologies. He is Chairman of the Board of Directors for the Semiconductor Research Corporation (SRC), which manages over \$100M per year to fund university research in the field of nanotechnology and to inspire and motivate more than 1000 students to pursue academic studies in high-demand fields. He also serves on public and industrial advisory boards to drive collaborative innovation agendas for the benefit of both academia and society.

Dr. Khare served as the General Chair of the 2018 Symposia on VLSI Technology, the Chip Industry's premier conference, and has co-authored more than 100 research papers over last two decades. He holds more than 25 U.S. and international patents for his inventions in the field of nanotechnology.

Dr. Khare began his career at IBM in 1998, after finishing his M.S., M. Phil. and Ph.D. degrees from Yale University and M.Tech. from IIT Bombay. A proud father of two and the husband of an architect, Dr. Khare is a strong advocate for diversity and equal opportunity in the workplace through sponsorship of initiatives such as PowerUp for women engineers.



Vice President Aeromechanics Technology Boeing Research & Technology The Boeing Company

### CITATION

Innovative executive who drives the industry in global technology development and program and engineering team leadership, while mentoring the next generation of engineers



## STEVEN J. YAHATA

Asian American Executive of the Year

Mr. Steven J. Yahata is the vice president of Aeromechanics Technology and leads the Boeing Research & Technology (BR&T) Research Center in Southern California. The organization is part of BR&T, Boeing's advanced central research and development unit. BR&T provides innovative technologies that enable the development of future aerospace solutions.

Mr. Yahata leads a team of scientists, technologists, technicians, and engineers conducting advanced research and development of flight, integrated vehicles, and structures technology. The organization specializes in advancing and transitioning technologies in the areas of aerosciences, aerodynamics, flow control, concepts and architectures, propulsion, guidance, navigation and control, structural design analysis and certification technologies, and multidisciplinary design, analysis and optimization.

Prior to this role, Mr. Yahata was the director of Structures for Boeing Defense, Space & Security (BDS) Engineering and led the BDS Design Centers, responsible for strengthening the mechanical and structural engineering capabilities, implementing new strategies, and overseeing engineering functional excellence across BDS programs.

Since joining Boeing, Mr. Yahata has served in several key leadership roles across the company. He was the director of BR&T's Structures Technology team in the Aeromechanics Technology organization. Under his leadership, the team successfully completed demonstrations of vehicle scale composite cryogenic tanks, ceramic matrix composite exhaust nozzles, and novel structural vehicle architectures. He also worked in the area of loads and aeroelasticity methods development supporting programs including the Space Shuttle, International Space Station, and experimental plane development.

Mr. Yahata earned a Bachelor of Science degree in engineering from the University of California, Los Angeles and a Master of Business Administration from Cal State University, Fullerton. He has also completed technical and professional development programs at the University of Southern California, Carnegie Mellon University, University of Washington, and The Wharton School of Business, University of Pennsylvania.

Mr. Yahata and his wife have two grown children; outside of work, he enjoys traveling, hiking, fishing, and photography.



Executive Vice President and General Manager Advanced Solutions Division ams

#### CITATION

Business executive with strategic vision pioneering sensor and semiconductor industries and exceptional service to promote woman leadership and community services



## JENNIFER ZHAO

Asian American Executive of the Year

Ms. Jennifer Zhao joined ams as Executive Vice President and General Manager for Advanced Optical Solutions Division in 2017, and led the team accomplished extraordinary business growth globally. Prior to that, she served as Senior Vice President, Global Sales and Marketing at Nexperia and held multiple prior management positions at NXP Semiconductors and Tyco International. Jennifer has managed various businesses including System Management, Logic and Microcontrollers and worked with leading OEM's worldwide in Mobile and Consumer, Automotive and Industrial segments. Currently Jennifer manages a global team with R&D, Operations, Marketing and Application resources in US, Europe, Greater China and South East Asia.

Optical sensors that detect color temperatures, proximity, digital ambient light, flicker, blood oxygen levels and more are essential in everything from mobile devices and video solutions to machine vision and healthcare devices. In addition, Jennifer and the global team are reimagining ams spectral sensing technologies for uses in devices that provide rapid testing and rapid results for COVID-19 in the fight against the global pandemic. Her team is working with companies around the world on solutions that will help detect the presence of both COVID-19 antigens and antibodies as well as PCR solutions.

Jennifer holds a Bachelor of Science degree in mathematics and economics from Beijing University in China and a Master of Business Administration degree from Suffolk University in the U.S. She is active in both professional events and community services. She is a 2021 advisory board member for the China International Semiconductor Executive Summit (CISES) and was a featured speaker at their event in Shanghai in 2019. Jennifer won Woman of the Year award at Questex's Sensors Innovation Week in 2020. Jennifer was also one of the honored speakers of the Inaugural Semiconductor Women's Forum in Singapore in March 2021.



CTO, Hybrid Cloud Management IBM Distinguished Engineer

### CITATION

A transformative leader bringing together three core competencies of Product and Technical Innovation, Business and Market Insights, Development Team Culture Transformation which led to the design and development of some of the leading management technologies from IBM



## PRATIK GUPTA

Asian American Engineer of the Year

Mr. Pratik Gupta is the Chief Technical Officer for IBM Hybrid Cloud Management and an IBM Distinguished Engineer. He has nearly 30 years' experience in the field of Computer Software engineering and specifically product design and development in the areas of Cloud Computing, Virtualization Management, Security and TCP/IP networking.

He is currently the Chief Architect of AI Powered Automation foundation at IBM. He has also been responsible for other industry unique product innovations like the IBM Multicloud Manager which won the Edison award for innovation in 2019 and 2020 in the area of Hybrid Cloud Management. Pratik has also won multiple corporate wide IBM Technical Achievement awards and has multiple patents in the areas of Computer Security, Cloud Computing and Systems Management.

Pratik has broad technical leadership and business leadership experience in developing new products that help enterprises transform their IT with Cloud and SaaS. He has managed large, geographically distributed development teams around the world and designed products that are being used by a large number of Fortune 500 companies. He has strong relationships with enterprise CxOs and industry analysts and is often the key speaker at webinars and conferences.

He lives with his wife in Raleigh, North Carolina. Pratik mentors' women entering the engineering profession in the community and women software developers and designers in IBM. His daughter has also chosen the engineering profession.

Pratik obtained his bachelor's degree in Electrical Engineering from Delhi College of Engineering, Master of Science degree in Computer Science from Virginia Commonwealth University and MBA from Duke University.



Lead Member of Technical Staff AT&T

### CITATION

Innovative and significant technical contributions in the field of network analytics and performance optimization for wireless and broadband services

### ZHI LI Asian American Engineer of the Year

Dr. Zhi (Z) Li currently serves as Lead Member of Technical Staff at AT&T Labs. He joined AT&T labs in 2005 after receiving a Ph.D. from UC Davis in Computer Networks. Zhi is an innovative technology leader in systems engineering and operation automation development for various technologies, including IPTV, 3G/LTE/5G and SDN. He has been responsible for network analytics, designing and developing network management solutions for performance optimization, capacity planning, and virtualized network function operational automation.

He was the key contributor to support AT&T's IPTV U-verse network initial launch – focusing on E2E video performance monitoring and trouble isolation solution design. He led a team of 15 wireless engineers to perform extensive E2E performance/capacity analysis and optimization to support iPhone and LTE/VoLTE launch. He architected and contributed many key components of AT&T SDN controlled OaaS (operation as a service) automation for virtualized network function. He is currently focusing on performance analytics for 5G service and edge cloud technology scaling.

Dr. Li has published 15+ papers at prestigious journals and conferences. He has 60+ patents issued by USPTO. He is also a registered patent agent at USPTO.





Executive Officer U.S. Army Inspector General Agency

### CITATION

For being a leader and solder of distinction, and making positive impacts to the community in various areas of engineering to include commanding numerous Army engineer units and mentoring future leaders



## DANIELLE J. NGO

Asian American Engineer of the Year

Colonel Danielle Ngo was born in Vietnam and was evacuated by the United States at the end of the Vietnam War with her mother and sister. They settled in Massachusetts and became refugees and later naturalized citizens. Wanting to give back to the country that saved her family, she enlisted in the Army in 1989 and attended Basic Training in 1990. Colonel Ngo later commissioned as a Second Lieutenant from ROTC at Boston University into the Corps of Engineers in 1994, and graduated from the University of Massachusetts with a Bachelor of Science in Finance.

She is currently the Executive Officer for the U.S. Army Inspector General, Pentagon, Washington D.C., which oversees assistance, investigations, and inspections for the Army. Prior to this assignment, she commanded the 130th Engineer Brigade at Schofield Barracks, HI from July 2016- July 2018, where she was the highest-ranking female Vietnamese to command an operational brigade. Her previous assignments include leadership assignments all over the United States and overseas including deployments to Bosnia, Iraq, and Afghanistan. She held assignments in engineering units that specialized in combat airborne engineering, construction, topography, bridging, diving, and route clearance. Notably, during Colonel Ngo's commands, her unit assisted with two of the largest wildfires in Colorado at that time, the Waldo Canyon and Black Forest Wildfires and constructed projects across the Pacific from Hawaii to Korea. Besides engineering, she held positions as a Joint Chiefs of Staff Intern in Washington D.C.; Chief, Engineer Maneuver Support Organizations, Fort Leonard Wood, Missouri; Military Assistant to the Chairman of the NATO Military Committee in Brussels, Belgium; and Executive Officer for the U.S. Pacific Commander at Fort Shafter, Hawaii.

Colonel Ngo holds a distinguished graduate Military Master of Arts and Sciences (MMAS) in Strategic Studies from the U.S. Army War College (USAWC), an MMAS in Theater Studies from the Command and General Staff College (CGSC), and a Master of Science in Public Policy from Georgetown University. Her military education includes the Engineer Officer Basic and Advanced Courses, Combined Arms and Services Staff School, CGSC, School of Advanced Military Studies (SAMS), USAWC, and the IG School Basic Course. She is also certified as a Project Management Professional (PMP).

Her awards and decorations include the Legion of Merit (1 OLC), Bronze Star Medal (1 OLC), Defense Meritorious Service Medal (1 OLC), Meritorious Service Medal (2 OLC), Joint Service Commendation Medal, Army Commendation Medal (2 OLC), Joint Service Achievement Medal (2 OLC), Army Achievement Medal (1 Silver OLC), Joint Staff Identification Badge, Army Staff Identification Badge, Combat Action Badge, Parachutist Badge, Army Engineer Association Silver Order of the de Fleury Medal, and German Sports Efficiency Badge (Gold).



Joint Simulation Environment Technical Lead Naval Air Warfare Center Aircraft Division

### CITATION

For technical contributions, expertise, and software development in the area of mission systems modeling and simulation and exceptional service to the U.S. Navy



## CAO Q. NGUYEN

Asian American Engineer of the Year

Mr. Cao Nguyen started his career as a software engineer for Northrop Grumman at Patuxent River, Maryland, in August 2000. There, he led the development of the Command and Control Warfare (C2W) variant High Level Architecture (HLA) Simulation Program in support of the F-18 variant. He also participated on the Integrated Product Team in developing the Improved Capability (ICAP III) program that upgraded the U.S. Navy EA-6B Prowler electronic attack aircraft. Mr. Nguyen also supported the Multifunctional Information Distribution System (MIDS) data-link terminal program.

He began his government career at NAWCAD in 2007 as the Modeling and Simulation Enterprise Applications Team Technical Lead. He and his team established common software management processes and delivered software products including the Next Generation Threat System (NGTS), Architecture Management Integration Environment (AMIE) and Common Development Environment (CDE) and other products used for training, research and development, test and evaluation and analysis. In this position, Mr. Nguyen mentored and led a team of over 140 software developers in eight different locations across the U.S.

Mr. Nguyen rapidly rose to prominence on the Next Generation Threat System (NGTS) Team. The application is a large suite of software tools that provide the environment for military pilot training and post-mission debriefing and replaying and analyzing data. Mr. Nguyen became the team lead after only two years on the project. He guided the design of the NGTS re-architecture making the application far more capable, reliable and maintainable. Mr. Nguyen led the 20-member NGTS team, which ranged in skills from entry level to advanced, and led them through the software engineering process to ensure delivery of an exceptional product to over 100 sites across the world in support of the U.S. Navy, Air Force, and several foreign allies.

In January 2019, Mr. Nguyen was selected by the F-35 Joint Program Office to assist the Navy's Joint Simulation Environment (JSE) development team in completing the integration of Lockheed Martin's high fidelity F-35 in-a-box (FIAB), a high-level project that will allow testing against dense surface and air threats.

Mr. Nguyen received his bachelor's in Computer Science from Virginia Polytechnic Institute and State University in 2000, and his Modeling and Simulation Masters Certificate from Old Dominion University in 2015.



Senior Aerospace Engineer U.S. Air Force Research Laboratory

### CITATION

Pioneering contributions in statistical optimal control theory, sustained leadership and strategic vision in game-theoretic operations research of military satellite communications, space control autonomy, and space domain awareness. Exceptional services to innovation ecosystem and coalition of government agencies, small business, and industry.



## KHANH D. PHAM

Asian American Engineer of the Year

Dr. Khanh D. Pham is a senior aerospace engineer in the Geospace Technologies Division at the Air Force Research Laboratory (AFRL) Space Vehicles Directorate, where he serves as the Air Force's principal scientific authority and independent researcher in space control & command autonomy, space situational awareness, and assure satellite communications.

As an AFRL aerospace engineer, his engagements with the Air Force and the greater research community are substantial. Dr. Pham has brought systems-theoretic science, control engineering principles and game-theoretic operations research paradigms, together with teamwork and interdisciplinary research to solve the Air Force's top engineering problems and capability priorities. The impacts of his contributions have resulted in many national awards. In 2008, General Bruce Carlson, Commander of the Air Force Materiel Command, awarded him the prestigious Air Force Outstanding Engineer Award. In 2014, his peers honored him as a "Fellow of the Society of Photo-Optical and Instrumentation Engineers." In 2018, he was nominated by an Asian- American small business and won the "4th Annual Champion of Small Business Technology Commercialization Award." In 2018, he won the Society of Asian Scientist and Engineers of the Year (government category) award and in 2019 won in the Professional Achievement category. In 2020, Dr. Pham was the first Vietnamese American to be a Fellow of the AFRL, an honor given to only 0.2 percent of AFRL's 5,000 professional technical staff each year and is AFRL's highest award.

As an AFRL researcher, Dr. Pham's pioneering scientific contributions to the development of novel statistical optimal control and game-theoretical operations research for space domain awareness, space control autonomy and military satellite communications are well documented. He has published 29 journal articles, 26 chapters in books, 260+ conference proceedings, the sole author of 2 research monographs, and inventor of 19 patents with 20 pending. In 2018, for his research contributions, Dr. Pham won the prestigious Arthur S. Flemming award in the Basic Research category. Of over 2 million federal employees, only 12 are honored each year, as he was the first Vietnamese American award recipient. His research breakthroughs are widely reported by both newspaper and online news media and he has given over 30 invited talks.

The service at AFRL has allowed Dr. Pham to meet and connect with many outstanding students and faculty across US, and to communicate, influence, and collaborate with many entrepreneurs. It gives him opportunities to gain experience in leading diverse teams of professionals across multiple theaters, which have enhanced his "global view" of the US Air Force. The most satisfaction Dr. Pham has is knowing he is able to serve, represent, and motivate high-tech small businesses and entrepreneurs that represent the growth and development of so many future leaders and engineers by means of America's Seed Fund and the likes. In essence, Dr. Pham can say that one thing he has learned is, being genuine is really how one gets to know the other person, and by doing so one will get the same thing back.



Principal Member of Technical Staff Sandia National Laboratories

### CITATION

Outstanding and sustained contributions in impact mechanics and advancing experimental and diagnostic techniques in support of Sandia National Laboratories' missions, defense, and national security programs



## **BO SONG**

### Asian American Engineer of the Year

Dr. Bo Song joined Sandia National Laboratories (Sandia) in 2008 and has been the principal investigator and lead of the Experimental Impact Mechanics Lab since that time. The Experimental Impact Mechanics Lab Dr. Song built is now the most active Dynamic Material Testing facility at Sandia and is one of the top Hopkinson bar labs in the world, serving nuclear deterrence, homeland security, transportation, nuclear launch safety, and defense programs. In addition to winning two Sandia Employee Recognition Awards, Dr. Song led his team to win a 2015 National Nuclear Security Administration Defense Programs Awards of Excellence for this work.

Dr. Song is a world-recognized expert in experimental impact mechanics and dynamic response of materials and structures. He has published a book (which has been translated into Chinese), six book chapters, over 130 international peerreviewed journal articles and conference papers, 12 SAND Reports (which are sent to the US Office of Science and Technical Information) and memos, and seven Department of Energy Technical Advances. He currently holds a patent on "Mechanical Testing Equipment for Material Characterization."

Dr. Song is highly active in professional societies and has served as Secretary (2008-2010), Vice Chair (2010-2012), and Chair (2012-2014) of the Society for Experimental Mechanics' (SEM) Dynamic Behavior of Materials Technical Division. Dr. Song was also a Secretary of American Society of Mechanical Engineers' (ASME) Dynamic Response of Materials Technical Committee. As a technical committee/division lead, Dr. Song was responsible for coordinating international conferences, publishing conference proceedings, and other society-related business. Currently, Dr. Song is serving as an Associate Editor for a prestigious international peer-review journal– *Mechanics of Materials*–and is a Founding Associate Editor for *Journal of Dynamic Behavior of Materials*. Dr. Song was elected as a Fellow of ASME in 2014.

Dr. Song enjoys participating in community services and volunteer activities. He is an invaluable supporter of Sandia's Asian-American activities; Dr. Song is now Vice-President of Chinese Institute of Engineers-New Mexico Chapter. He has supported K-12 science, technology, engineering and math (STEM) activities and performance through the annual regional Future City Competition program and New Mexico Chinese School of Arts & Language as a volunteer and a mentor. Additionally, Dr. Song supports youth sports volunteering as a coach, a photographer of youth soccer teams, and a certified US Soccer Federation referee.



Technical Fellow Materials Manufacturing Technology Boeing Research & Technology Engineering, Test & Technology The Boeing Company

### CITATION

A prolific innovator and internationally renowned expert in sensors and physics for nondestructive inspection and materials evaluation, whose work addresses product improvements, manufacturing, and service longevity in the aerospace, food, agricultural, and petrochemical industries.



## **MORTEZA SAFAI**

Asian American Engineer of the Year

Mr. Morteza Safai is a Technical Fellow at The Boeing Company and an internationally known authority and expert in sensors and physics for nondestructive inspection (NDI) and materials evaluation. At Boeing, he is the Principal Investigator and technical lead for the development of NDI sensors and systems for nanotechnology NDI, X-ray backscattering system, X-ray CT, shearography, thermography, machine vision, and electro-optic bases sensors. His work developing new sensors addresses specific industry needs including product improvements, manufacturing, and service longevity and significantly impacts the aerospace, food, agriculture, and petrochemical industries.

In addition, Mr. Safai serves as the technical lead in Materials Manufacturing Technology (M&MT) road map development and the M&MT Functional Thrust Leader. He is the technical lead for the NASA Phase–II Advanced Composites Project (TC2), technical lead in the Boeing joint ASTAR (Agency for Science Technology and Research) Singapore Consortium, and technical lead in the development of automated crack detection in railroad axles.

Born in Iran, Mr. Safai moved with his family to Salt Lake City, Utah, in 1978. He earned his Bachelor of Science and Master of Science degrees in Physics from the University of Utah. Since then, he's built an impressive career, including 25 years with The Boeing Company. He was appointed a Boeing Associate Technical Fellow in 2007 and a full Technical Fellow two years later. He holds more than 210 US and international patents and patents pending and has 26 technical publications.

Mr. Safai's innovations are many. For example, from 2006 to 2019, he led the development of Boeing's X-ray backscattering system for aerospace application, and in 2011 was awarded the Special Invention Disclosure of the Year. In 2013, he developed the rapid inspection system of 787 lithium ion batteries; and in 2003, he led the development of a high-speed automated X-ray food inspection program at John Bean Technology Corp.

He is not only a technical leader, he also mentors and helps others—he teaches, trains, and mentors young engineers in fields of shearography, infrared, X-ray backscattering, and microwave. Mr. Safai is also a sought-after speaker nationally and internationally and shares his knowledge with the industry frequently.

Outside of work, Mr. Safai is a professional landscape artist and enjoys numerous outdoor activities, including skiing, mountain biking, and trail running. He and his wife and the rest of his family live in Newcastle, Washington.



Staff Researcher General Motors Global Research and Development Center

### CITATION

Original and sustained contributions to the surface coating and its industrial applications



## **XINGCHENG XIAO**

Asian American Engineer of the Year

Dr. Xingcheng Xiao is a Chinese American research scientist, husband, and father of two children. He was educated in China, with his Bachelor's, Master's, and Ph.D. degrees all in Materials Science and Engineering. He also spent one and a half years in Germany as an Alexander von Humboldt Fellow before he moved to the USA.

Dr. Xiao started his postdoctoral work at Argonne National Laboratory in 2002, where he developed a novel technique to encapsulate artificial retina implant with diamond coating to restore human vision. In addition, he also developed a variety of nanostructured carbon materials for water treatment, microelectronics, and other applications.

Dr. Xiao joined the GM Global Research and Developments Center as a Senior Researcher in 2006 and was promoted to Staff Researcher in 2010. His passion in making the world a better place has led to numerous innovative breakthroughs in lithium ion batteries for electrical vehicle applications. In addition, he has been leading several collaborative projects with leveraged research funding from the Department of Energy to enhance the fundamental understanding of battery failure mechanism.

Dr. Xiao has over 80 granted patents, with more than 20 currently used in GM products or licensed for commercialization, over 160 peer-reviewed publications, and numerous invited talks at international conferences. He is also the recipient of several prestigious awards, including two-time R&D 100 Awards (2013 and 2017) and 2011 SME "Innovations That Could Change the Way You Manufacture" Award.

Dr. Xiao has made significant contributions to the scientific community. He has been the editor-on-board for several high-impact journals, organized many conferences, and frequently been invited to review proposals for federal funding agencies. He has supervised over 10 postdocs and interns and served on thesis committees for graduate students.

Dr. Xiao likes tennis and biking and enjoys classical music in his spare time. He has also been an enthusiastic mentor to youth robotic teams in the local school district.



Staff Researcher General Motors

### CITATION

Pioneering contributions in development of automotive active safety and autonomous vehicle sensor fusion and perception systems



Asian American Engineer of the Year

Dr. Shuqing Zeng is a Chinese American scholar and engineer. He received his first college degree in Electrical Engineering from Zhejiang University, Hangzhou, China in 1991. He received the Master of Science degree in Computer Science from Fudan University, Shanghai, China in 1994. Afterwards he became a lecturer in Department of Computer Science Department, Fudan University, Shanghai, China from 1994 to 1999. He came to USA as a graduate student in 1999. He received the Ph.D. degree in computer science from Michigan State University, East Lansing, MI, USA, in 2004.

Since 2004, Dr. Zeng has been with the Research and Development Center, General Motors Company, Warren, MI, USA, where he is currently a Staff Researcher and thrust area lead in areas of automotive sensor fusion and perception systems. His research interests include computer vision, sensor fusion, autonomous driving, and vehicle active safety applications. Dr. Zeng currently is the chair of The Ad-Hoc Committee on Autonomous Vehicles in The IEEE Vehicular Technology Society (VTS). He was the Editor of the IEEE Computational Intelligence Society Autonomous Mental Development Technical Committee Newsletter from 2005 to 2007. He was an Associate Editor of the International Journal of Humanoid Robotics (2007-2012). He served as a session chair for IEEE American Control Conference (2010). Dr. Zeng was a Member of the Tartan Racing team that won first place at the Defense Advanced Research Projects Agency (DARPA) Urban Challenge on November 3, 2007.





Engineer Naval Undersea Warfare Center Division, Newport

#### CITATION

Inspiring mentor and technical leader for the next generation of engineers and technicians supporting the submarine fleet



## POONAM AGGARWAL

Asian American Most Promising Engineer of the Year

Ms. Poonam Aggarwal of the Naval Undersea Warfare Center Division, Newport dedicates her expertise to the Sensors and Sonar Systems Department as a System Lead for the development of Large Vertical Array (LVA) test sets. Crucial to the evolution of naval technology, rigorous testing leads to safe and accurate systems that enhance warfighter capabilities.

In her current role, Ms. Aggarwal leads a multi-disciplinary team to test LVA Outboard Electronics to be used on current and future classes of submarines. Her success in developing the highest fidelity of testing can be attributed not only to her own technical acumen but to her ability to inspire her team to be diligent and determined in their tasks. Her teams are known for their problem-solving skills and strategic thinking. Besides managing people Ms. Aggarwal is adept at managing complex schedules and large budgets. She is consistently on time and on budget. Her understanding of what is best for the sailor was developed through her involvement with the Sea Mentor program, which allowed her to go underway on an operational submarine. Mentoring is a top priority for Ms. Aggarwal as she helps team members reach their potential by breaking down barriers caused by uncertainty and low selfconfidence. Outside of her work team, she shares her experiences and advice with high school students through one of the Command's educational outreach programs.

Ms. Aggarwal received her Bachelor of Engineering in electrical engineering from the City College of New York and her Master of Engineering in ocean engineering from the University of Rhode Island. Her future plans at Division Newport include obtaining a Branch Head position so she may help newly hired engineers develop the skills needed to best serve the Fleet.



Principal Investigator DuPont Electronics & Imaging

### CITATION

For his scientific contributions in the development of key semiconductor lithography material, including photoresists for DUV and EUV lithography



## EMAD AQAD

### Asian American Most Promising Engineer of the Year

Dr. Emad Aqad received his B.Sc., M.Sc. and Ph.D. degrees in chemistry from Ben-Gurion University of the Negev, Israel. His undergraduate research involved design, synthesis and studies of organic strong electron donor (D) and acceptor (A) molecules capable of multi-stage redox processes and D-A electronic interactions. These novel compounds exhibit unusual electro- and photo-physical properties and are important components of advanced materials.

Dr. Aqad was the recipient of the French Distinguished Chateaubriand Fellowship and was a visiting scholar at the CNRS Laboratory of Molecular Engineering and Organic Materials in Angers, France. He was a postdoctoral fellow at the University of Alabama and the University of Pennsylvania before Joining Rohm and Haas in 2007. His research interest lies at the interface of organic and material chemistry, focusing on design, synthesis and study of the properties of complex molecular, macromolecular and supramolecular organic materials and their implementation in the fabrication of electronic devices.

Dr. Aqad is now a Principal Research investigator at DuPont Electronic and Imaging business. His work at Dupont revolves around the development of sophisticated lithographic materials. Of central importance is his research on lithographic materials designed for advanced patterning technologies such as KrF, ArF and Extreme Ultraviolet Lithography (EUVL). His innovative solutions have been the foundation for commercially enabling lithographic products.

Dr. Aqad has 26 issued US patents with more than 18 pending US patents and is author and co-author of 36 technical peer reviewed papers. He was recipient of Israeli Chemical Society Distinguished Scholar Award and the recipient of Dow Electronic Materials Career Impact Excellence in Science Award.



Processes and Tools Senior Leader Electrical Design Functional Integration Boeing Commercial Airplanes The Boeing Company

#### CITATION

A technical leader, innovative problem solver, and dedicated mentor who has successfully led multiple teams in developing and improving products and processes while promoting diversity and inclusion in STEM within The Boeing Company.



## JACKY-VY C. CHAU

Asian American Most Promising Engineer of the Year

Mr. Jacky-Vy Chau is an emerging engineering leader who leverages his outstanding technical innovations and desire to help others to further the enterprise and the industry. Mr. Chau is a Senior Leader for the Boeing Commercial Airplanes (BCA) Electrical Design Functional Integration—Processes and Tools organization where he drives and executes the organization's key objectives and enables common design practices, strategizes on "One" Boeing Technology Roadmap, and provides world-class processes, tools and applications support and service to Boeing stakeholders. Mr. Chau utilizes industry standards to align with 2nd Century Enterprise Systems (2CES) and creates an innovative process/tool that provides competitive advantages. It includes design of the production system and support and uses the latest technology applications that enable automation, data management, and analytics. Mr. Chau also represents BCA as a Co-Chair for Enterprise Electrical Design Integration Business Leaders to develop, improve, and standardize the design applications and processes that can be utilized by the global Boeing workforce.

Previously, Mr. Chau was an Electrical Standards and Design Engineering Manager and led 23 experienced engineers to develop, qualify, and certify electrical components for BCA. He substantially improved productivity while reducing staffing costs by about 20% and saved at least \$15.6 million per year by continuously improving the production rate and systems. Before this, he led 25 engineers supporting the 777X Electrical Design Organization; he minimized engineering rework and enabled a faster installation rate, reducing costs by about \$70 million and build time by two hours per day.

A positive, energetic, and approachable leader, Mr. Chau mentors more than a dozen engineers, interns, and engineering managers by providing career and technical guidance. Most recently, Jacky became a sponsor for the Airplane System Management Development Program (ASMDP), a career enhancement program.

Mr. Chau avidly promotes and supports STEM and diversity and inclusion. Within Boeing, Mr. Chau is the company focal for the Society of Asian Scientists and Engineers (SASE), is active within the Boeing Asian-American Professional Association (BAPA), and is a speaker, panelist, and mentor at Boeing "Lunch-n-Learns." Outside of work, Jacky serves on the board of the Asian Counseling and Referral Services (ACRS) and volunteers for Clothes for Kids, Flight Heritage Center, and Vision House, among others. He is also a scholarship interviewer for the Greater Seattle Business Association (GSBA) and speaks about STEM at local universities and at national conferences. He holds many internal and external cross talk events to encourage people to discuss their career and technical development.



Senior Staff Researcher Idaho National Laboratory

### CITATION

Rising technical innovator, leader, and principal investigator in electrochemical conversion of inexpensive feedstocks to value-added chemicals and fuels, and scaling and manufacturing of electrochemical systems



## DONG DING

### Asian American Most Promising Engineer of the Year

Dr. Dong Ding is a senior staff engineer in the Energy and Environmental Science & Technology directorate at Idaho National Laboratory, leading a group of 17 researchers in electrochemical processing and electrocalalysis for clean energy storage and conversion. He is a principal investigator for multiple projects including direct funded and Laboratory Directed Research & Development (LDRD).

Dr. Ding is a technical lead for the HydroGEN of Energy Materials Network under DOE-Energy Efficiency and Renewable Energy (EERE)-Fuel cell Technology Office. His lab has fully equipped capabilities of HT roll-to-roll (HT-R2R), solid oxide additive manufacturing, high throughput materials testing, elevated temperature electrocatalysis, and electrode engineering and diagnosis.

He is an adjunct professor in the departments of Chemical & Materials Engineering at New Mexico State University and University of Idaho, respectively. Before joining INL, he was senior materials engineer at Redox Power Systems in Maryland.

Dr. Ding received his doctorate in material science at the University of Science & Technology of China, where he earned a bachelor's in materials chemistry. He was a postdoctoral fellow at West Virginia and National Energy Technology Lab in Morgantown, West Virginia (2009-2010) and at Georgia Institute of Technology (2010-2014).

Dr. Ding has 89 peer-reviewed publications with an H index of 30, where three are highly cited (ESI) and 29 have an impact factor over 10. He holds three U.S. patent and 11 patent applications He served as an executive committee member at High-Temperature Energy, Materials and Processes division for the Electrochemical Society, an editorial board member for Journal of Power Sources Advances and a guest editor for Frontier in Materials and Frontier in Chemistry. His current research interests include natural gas/natural gas liquids upgrading, hydrogen production through water splitting, advanced manufacturing of solid oxide cells/stacks, hybrid energy integration, CO2 conversion, ammonia electrosynthesis, fuel cells, elecrocatalysis, and batteries.



Computer Scientist Information Technology Laboratory U.S. Army Engineer Research and Development Center

### CITATION

Rising developer and researcher who has pioneered tools providing innovative solutions to ensure the sustainability and success of Army Missions



## INDU SHUKLA

### Asian American Most Promising Engineer of the Year

Ms. Indu Shukla is a Computer Scientist, Information Technology Laboratory, U.S. Army Engineering Research and Development Center (ERDC). As a Computer Scientist she has passion for Machine learning and Data science. She has been a lead developer and researcher in building state-of-the-art applications and delivering innovative and cutting-edge Artificial Intelligent (AI) and Machine Learning (ML) solution to the enterprise. She earned a Bachelor's degree in Computer Science from Jackson State University, and a Master's degree in Computer Science and Engineering from Mississippi State University (MSU). She joined ERDC in 2010 as a Computer Scientist.

As a lead application developer and researcher, she has pioneered tools providing innovative solutions to ensure the sustainability and success of Army missions. She is currently focused on the development of AI/ML based solution to Army's problem such as real-time monitoring, fault diagnosis and health management of army's assets using High-Performance Data Analytics (HPDA) for predicting the likelihood of imminent failure. She is also currently involved in research and development of smart facilities creating data-rich digital twin models to perform predictive analysis to detect anomalies in facility infrastructure systems.

Indu finds the field of research and development enormously rewarding. She is passionate about promoting younger generation in STEM career. She has participated in outreach activity to mentor youth and educate kids to promote STEM career. She served as a judge for the FIRST Robotics competition, mentored students and provided hands on experience on programming and development.

In her free time, she enjoys hiking, gardening and bird watching.


### 2020~2021 MC

**Shawn Flynn** is a Principal at the Investment Bank, Global Capital Markets, where he works with Mid-Market companies whose revenue is between 10-200M looking to do a Merger or Acquisition (working on either the buy or sell side), raise a Growth round of Capital (greater than 10M) or buy/sell Secondary's of Pre-IPO companies.

#### **Background:**

Shawn spent 4 plus years living and conducting business in Beijing, China. While in China, he founded, grew, and profitably exited a successful education company. Shawn moved back to San Francisco to invest his experience, connections, and resources back into the world's deepest and most vibrant technology ecosystem.

Shawn works with institutions, governments, and various capital sources, to help promote economic growth at a global scale. He is heavily involved in the Silicon Valley technology ecosystem of fast growing, high potential businesses. He has played a pivotal role to help multi-nationals, both pre and post-IPO companies including overseas "Unicorns", set up operations in Silicon Valley while connecting prominent Silicon Valley companies with strategic and funding sources overseas.

Shawn is the founder of the TV show "Silicon Valley Successes" and hosts the podcast "The Silicon Valley Podcast". He is passionate about building bridges that connect Silicon Valley to the rest of the world.

Shawn holds a Bachelor of Science in Mechanical Engineering from UCSD and speaks Mandarin and Spanish. He also holds FINRA Series SIE, 7, 24, 63, and 79 licenses.

Shawn lives in San Francisco and practices Brazilian Jujitsu, Salsa Dancing and has a passion for learning about languages and cultures.





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### 2020~2021 MC

### **Christy Wang**

hristie Wang is a serial entrepreneur and investor in the medical field, in particular medtech. She co-founded and invested in SpineEX, which developed innovative interbody implants and is in full commercialization in US. She also co-founded and is leading a stealth mode start-up, launching an orthopaedics surgical robot resolving clinical problems for spine surgeons. Prior, Christie was CEO of Jiangsu International Industrial Research and Investment Group (USA), a cross-border venture firm and industrial platform supported by Jiangsu Province, PRC and was empowering innovative smart healthcare and medtech products in their Asia entry endeavors. Before that, Christie worked for Hewlett Packard Legal/Corporate Department in Palo Alto, CA.

Christie holds a Juris Doctor (J.D.) from Northwestern University School of Law, studied at Kellogg business school and completed Northwestern Medical Innovation Program. She was appointed Library Commissioner, City of Cupertino in 2017 and served her four-year term. She served as mentor for Stanford University Technology Innovation. Christie was awarded the Most Outstanding Overseas Youth Chinese by the State Council of PRC in 2015 and met with Chinese President Xi Jinping in Seattle. Christie speaks Mandarin, English, Cantonese and conversational French. She is a skier, bi-lingual MC/show host, and salsa/bachata dancer.

### 2020-2021 AAEOY Speaker Series

AAEOY Speaker Series invites past awardees to share their technical outlooks and personal journeys, with a presentation and an interview in each event. This year's theme is "Improving Life- Beyond Smart Technology, Towards a Smart Society".





### AAEOY CAREER FAIR ONLINE EVENT

### **EFFECTIVE JOB APPLICATION** DURING AND POST PANDEMIC!

A PANEL ON "EFFECTIVE JOB APPLICATION" BY TALENT-ACQUISITION.

- A WORKSHOP "HOW TO DO THE RESUME RIGHT" WILL GO THROUGH

REAL EXAMPLES.

- "ONE ON ONE VIDEO"

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JOB OPENING LIST.

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CAREER UP



### JUNE 5TH SAT.

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### 1:00 - 3:00 PM PDT

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to Aitfiniar Intelligence County

JOIN US

20



Zoom link will be provided before the event date.

THE NPO CAREER UP CLUB JOINS WITH HIGH-TECH HIRING MANAGERS FROM GOOGLE, AMAZON, FACEBOOK, MICROSOFT, ETC.

https://aaeoy20210605.eventbrite.com **REGISTRATION:** 



### JULY 31 ST SAT. 1:00 - 4:00 PM PACIFIC TIME

#### **JOIN US**



Zoom link will be provided before the event date.

- 1. IS GETTING MY TASK DONE ENOUGH TO ADVANCE
- MY CAREER? WHAT DOES MY SUPERVISOR EXPECT?
- 2. HOW TO MANAGE CONFLICT?
- 3. HOW TO DEVELOP MY LEADERSHIP?

**REGISTRATION:** https://aaeoy20210731.eventbrite.com





## Virtual **LIVE Invitation-only** Event VIP Reception and Celebration

for <u>awardees</u>, <u>sponsors</u>, committee members and important guests

Bring your favorite drink and glass for toasting

| Agenda    |   |  |  |  |  |  |
|-----------|---|--|--|--|--|--|
| 1:30-1:50 | Reception, Exhibition                           |  |  |  |  |  |
| 1:50-2:00 | Opening, AAEOY Chair Welcome Speech             |  |  |  |  |  |
| 2:00-2:05 | 5 Sponsor Chair Speech                          |  |  |  |  |  |
| 2:05-2:12 | Sponsor Representative Speech                   |  |  |  |  |  |
| 2:12-2:16 | Nomination Chair Speech                         |  |  |  |  |  |
| 2:16-2:30 | Awardees Brief Introduction                     |  |  |  |  |  |
| 2:30-2:35 | 2:35 Committee Chair Introduce Ceremony Program |  |  |  |  |  |
| 2:35-3:00 | Mingle, Networking, Mixing Session              |  |  |  |  |  |



Video chat in fully customizable and 2D interactive spaces



Time: 1:30-3:00PM PDT, 4:30-6:00PM EST

Date: Sat, July 17, 2021

### **CIE-SF 2020 Student Scholarship Awards**

### Announcement - 2/14/2021

Board of Director, Tien-Chun (TC) Yang

Due to the global pandemic, our annual conference was not held in 2020. The following are the High School Students who won our scholarship awards.

Being the oldest Chinese engineering and science society in North America, CIE/USA-SF has established this award program to recognize the outstanding high school students of its members. The selection criteria is based on an overall accomplishment of applicants' academic performance, extracurricular activities achievement and the participation in community services. CIE/USA-SF appreciates your participation in our events, and the scholarship application!



### Alan Lee Palo Alto High School

- Two time winner of Camp BizSmart's business summer program
- Palo Alto High School's Speech and Debate team
- Planet Granite Advanced Climbing Team
- GPA 4.0 (un-weighted)



### Anna Liu Irvington High School

- President's Volunteer Service Award Gold Level, 2019
- President's Volunteer Service Award Bronze Level, 2018, 2017
- Fremont Youth Symphony Orchestra
- AP Scholar with Honor



### Annie Liu Santa Clara High School

- Varsity Girls Basketball (team captain)
- President: Chinese Student Association and TED Talk Club
- Vice-president: Girls Who Code and Kids Are Scientists Too
- Pixelhacks IV: Best Web App Award
- GPA 4.0 (un-weighted)









#### **Bryant Huang**

#### Lynbrook High School

- Student Leader at Youth Group (since 2017)
- American Cancer Society Media Competition Organizer (2019)
- Mexico Service Trip (since 2017) (300+ hrs.)
- Tech Support at the Level Up 2020 Conference (2019)

### David Ke

#### The King's Academy

- Certificate of Graduation from Junior Leaders Training Academy with Saber Award, Royal Rangers ('19)
- Leadership-Integrity-Teamwork Award, TKA High School JV Tennis Team (Spring 2019)
- Step-Up Award, TKA High School FTC, Robotics Team (2018~2019)
- President Volunteer Service Award (9th, 10th, 11th)

### Kelly Yeh

#### Lynbrook High School

- Nine Star University of Health Sciences volunteering (100+ hours) and Gold Presidential Award
- 3rd Place for Japanese Speech Contest (Shareworld)
- 1st place and judge's favorite for "Spring" oil painting, 2nd place for "Paradise" oil painting
- Lynbrook Varsity Softball (participation and scholar awards)
- GPA: 4.0 (un-weighted)

#### Krystal Lan Saint Francis High School

- Won silver & bronze medals at World Kungfu Championships at Emeishan, China (June 2019)
- Grand Champion of Tiger Claw Kungfu Competition in 2016, 2017, and 2019
- Won Adahacks II, all-girls hackathon at Google in Sunnyvale (October 2019)
- Board member of Science and Engineering club











#### *Lindsey Wei* Fremont High School

- President: Garden Club
- Event Coordinator: Octagon Club Cabinet
- Varsity Team Badminton: varsity 1 doubles/mixed
- Certificates: First aid and CPR 2019

### *Lucy Qian* Valley Christian High School

- CEO of team: Presidents Business Challenge (2019-now)
- Project Manager: Bizsmart Accelerator at Santa Clara University (2019)
- Youth America Grand Prix: Top 12 Junior Category (2018, 2019)
- California Dance Classics: 3rd Place (2019)

### Lydia Wang Milpitas High School

- President/founder: Bring Change to Mind Club
- Publicist, youth panel speaker: California Advocate Teens of Today:
- Milpitas Science Olympiad, Gold Team
- Orion Abacus Mental Math Scholarship Winner

### **Patrick Yeh**

#### Homestead High School

- Recipient of Homestead High School Green and White Award (2018)
- Co-founder and officer of Taiwanese Student Association and Table Tennis Club
- Track and field award winner: El Camino Division team champion (2019), 4\*100m relay 2nd place, 100m 6th place, triple jump 5th place (2019), Long jump 5th place (2018)
- Volunteer at AEF summer camp in Taiwan (100+ hours)

### **Ryan Shang-Yi Wang** Summit Public Schools

- Grizzly of the Year (2019)
- Boy Scout Eagle Rank
- Volunteering in Scouting, Science Camp, and other activities, 400+ hours
- GPA 4.0 (un-weighted)

### About CIE/USA

Founded in 1917, Chinese Institute of Engineers/USA (CIE/USA) is a non-profit professional organization of Chinese-American engineers, scientists, and other professionals. The objectives of CIE/USA are to promote Science, Engineering, Technology and Mathematics (STEM), encourage professional advancement and leadership development for Asian-Americans, and provide recognition to Asian American professionals at the national level through flagship programs such as AAEOY. As one of the oldest and the most prestigious Chinese-American engineering associations in the US, CIE/USA has seven area chapters across the nation and hold many events monthly.

#### Currently, CIE/USA has 7 regional chapters in the US

- ★ Greater New York (CIE/USA-GNY)
- ★ San Francisco Bay Area (CIE/USA-SFB)
- ★ Southern California (CIE/USA-SOCAL)
- ★ Dallas/Fort Worth (CIE/USA-DFW)
- ★ Seattle (CIE/USA-SEA)
- ★ New Mexico (CIE/USA-NM)
- ★ Oversea Chinese Environmental Engineers and Scientists Association (CIE/USA-OCEESA)

|   | Notional Cour<br>Chair<br>Vice Chair<br>Treasure<br>Secretary | n <u>cil Officers</u><br>Bing Liang Neris<br>Monsong Chen<br>Xinfen Chen<br>Bo Song |     | National (<br>Tiger Zhou<br>Cheng-Yi L<br>Chuching<br>Jinghi Niu | u<br>_in<br>War    | •  | ond Chen<br>hu Zhang                                    |  |  |
|---|---|---|-----|--|--------------------|--|---|--|--|
| Cheng-Yi  | <mark>New York</mark><br>Lin Frank Shi<br>ng Yau Pin-Yu Ch    |   |     | <u>rth</u><br>Simon Cha<br>Claire Jung                           | -                  | <mark>San Francisco E</mark><br>Andrew Fang<br>David Fong<br>Brian Pan | <mark>Bay Area</mark><br>Raymon<br>Bill Kao<br>Jonathar |  |  |
| <b>Southern Cal</b> i<br>Chuching Wa<br>Tiezheng Zha<br>Wen Cheng | ng Mabel His  | <u>Seattle</u><br>Angelina Huang<br>Xiaoxi Wang<br>Jenny Chang                      | Gir | i Wang<br>na Li<br>atthew Ma                                     | Per<br>Edv<br>Liji | <b>w Mexico</b><br>ngchu Zhang<br>ward Hong<br>ng Bu<br>ngsung Cheng   | Shao  | <b>ESA</b><br>Iui Niu<br>-Yuan Leu<br>-Min Cheng |  |



#### **AAEOY Volunteers**

Third row: Tien-Chun Yang, Andrew Fang, An-Yu Kuo | William Kao, Richard Yao, Yingbin Wang, Tony Liu

Second row: John Xie, Melissa Zhang, Yazhou Liu, Su-Syin Chou

First row: Brian Pan, Raymond Chen, Larry Wang, Jonathan Chiang, Yu-Ju Tsai, David Fong, Chi-min Chu

 Description
 Actional Council AAEOY Chair:
 Raymond Y. Chen

 Executive Committee Chair:
 Brian Pan

 Nomination Chair:
 Dr. David Fong

 Sponsorship Chair:
 Dr. An-Yu Kuo

 Talent Meet-Up Chair:
 Dr. Larry Wang

 Pre-Award Gala Chair:
 Dr. Lirry Wang

 Wil Reception Chair:
 Dr. Chi-min Chu

 Awards Banquet Chair:
 Dr. Chi-min Chu

 Awards Banquet Chair:
 Dr. Villiam Kao

 Hospitality Chair:
 Dr. John Xie

 Sponsor Coordination:
 Dr. John Xie

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 Dr. John Xie

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 Jonathan Chiang

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 Dr. Zhi Zhai

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 Sponsor Relations?
 Dr. Tien-Chun Yang

 Sponsor Relation:
 Dr. Tien-Chun Yang

 Sponsor Relation:
 Dr. Tien-Chun Yang

 Mueer Coordination:
 Dr. Tony Liu

2020-2021 AAEOY Nomination Committee Chair: Dr. David Fong Member: Dr. Tony Torng, Dr. Jason Wen, Dr. Eric Wu, Jason Yeh, Pengchu Zhang

### **Special Thanks**

### Special thanks to Ta-Lin for inviting keynote speakers, obtaining proclamation letters and providing various support



### Dr. Ta-Lin Hsu

- Founder & Chairman, H&Q Asia Pacific
- Chairman Emeritus, Give2Asia
- Founding president of CIE-SF

## Special thanks to P.K. and Tsu-Jae for their advice on awardee nomination and program preparation



### P.K. Agarwal

- Dean, UCSC Silicon Valley Extension;
- Former founding CEO and regional Dean of Northeastern University -Silicon Valley;
- Former CEO of TiE Global;
- Former Chief Technology Officer of State of California



### Prof. Tsu-Jae Liu

- Dean and Roy W. Carlson Professor of Engineering, UC Berkeley;
- 2019 AAEOY Distinguished Awardee



### Special Recognition

Supporting Partners: Career Fair Partners:

Conference Advisor: Sponsors Coordination:

Distinguished Award Coordinatio Pre-Award Gala: MC: Video Production: Video Assistant: Media Relations: Virtual Platform Advisor: Facility Assistant : Registration Volunteers:

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Lun Tsuei, Claire Jung

Xinfen Chen, Claire Jung, Xiaoxi Wang, Tian Ma, Chinpei Tang, Toni L. Carter

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Christie Wang, Shawn Flynn

Richie Yao, Loren Schneider

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Brian Xu, Ariel Xiao, Yanshu Li, Joseph Ting, Simon Tan, Claire Chang, Milton Ren, Show Liao, Vicky Liau, Qizhang Jia, Debby Li, Wan-Ru Yang, Fei Cai, Wen-Sen Lu, Maxine Leu, Stephen Lee 50

#### **2019 AAEOY**

### Dallas, TX, August 17th, 2019



AAEOY 2019 Planning and Executive Committee Team



AAEOY 2019 Awardee

### **Thanks to All AAEOY Sponsors**

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Chinese Institute of Engineers, USA (CIE/USA), founded in 1917 in New York, is a non-profit organization promoting the advancements of science and technology, as well as STEM education. CIE/USA has 7 chapters throughout the USA

Hosted by CIE/USA San Francisco Bay Area Chapter

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Capital Group Private Client Services supports CIE-SF in promoting STEM education, celebrating professional excellence and spotlighting leadership.

Junia Pan Li and the entire team at Capital Group Private Client Services extend our congratulations to the 2021 Asian American Engineer of the Year honorees.



**Junia Pan Li** Senior Vice President, Private Wealth Advisor

Junia.PanLi@capgroup.com 626-991-2881

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**Dr. Dong Ding** Senior Staff Researcher

Asian American Most Promising Engineer of the Year Award

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Dr. Song is a world-recognized expert in experimental impact mechanics and dynamic response of materials and structures. He is the principal investigator and lead of the Experimental Impact Mechanics Lab at Sandia National Laboratories. The Experimental Impact Mechanics Lab Dr. Song built is now the most active dynamic material testing facility at Sandia and is one of the top Hopkinson bar labs in the world, serving nuclear deterrence, homeland security, transportation, nuclear launch safety, and defense programs. (Hopkinson bars test the dynamic stress-strain response of materials.) Dr. Song's work provides a valuable contribution to Sandia's mission in innovating and discovering new technologies to strengthen the nation's technological superiority.

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2022 AAEOY in Los Angeles Hosted by SOCAL & OCEESA Chapters

August 5-6,2022

Chuching Wang, Ph.D., P.E. (Chairman, SOCAL) Jinghui Niu, P.E. (Co-Chairman, OCEESA)



### Time: 4:30pm – 7:00 EDT, 1:30pm - 4:00pm PDT



https://youtu.be/SS6s8yCUPsc





Hosted by CIE/USA San Francisco Bay Area Chapter

