

**National Academy of Engineering – Engineering Academy of Japan
2021 Japan-America Frontiers of Engineering**

Virtual

June 22-25, 2021/**June 23-26, 2021**

All US times are Eastern Time. **Dates and times in red are Japan Time.**

Program

Tuesday, June 22 / Wednesday, June 23

7:00 PM ET/
8:00 AM JST Help Desk / EPB Onboarding *Lobby*

8 PM ET/
9 AM JST Welcome Reception *Lobby*

Wednesday, June 23 / Thursday, June 24

4 PM ET/
5 AM JST Help Desk / EPB Onboarding *Lobby*

5 PM ET/
6 AM JST Welcome *Lecture Hall*
-- John L. Anderson, President, National Academy of Engineering
-- Yoshimitsu Kobayashi, President, Engineering Academy of Japan
Opening Remarks
-- Symposium co-chairs: David Tse, Stanford University, and Hidemitsu Furukawa, Yamagata University

5:15 PM ET/
6:15 AM JST **SOFT ROBOTICS**
Session co-chairs: Kenjiro Tadakuma, Tohoku University, and Elliot Hawkes, UC Santa Barbara (Elliot subbing for Michael Dickey, NC State)

Shape-Shifting Soft Robots that Adapt to Changing Tasks and Environments
Rebecca Kramer-Bottiglio, Yale University

Soft Robotics: Industrial Perspective
Yigit Menguc, Facebook Reality Lab/Oregon State University

Bio-inspired, Digital-fabricated Soft-bodied Robots
Takuya Umedachi, Shinshu University

Soft Chemical Robots and Machines
Shingo Maeda, Shibaura University

6:45 PM ET/
7:45 AM JST Meet and Connect Networking (shuffle) *Multipurpose Room*

*We would like to express our gratitude to
The Grainger Foundation, the US National Science Foundation, and Dr. Arogyaswami J. Paulraj
for their support of the 2021 Japan-America Frontiers of Engineering Symposium.*

7:15 PM ET/ 8:15 AM JST	Break	
7:30 PM ET/ 8:30 AM JST	Poster Session 1	Poster Hall
8:15 PM ET/ 9:15 AM JST	Poster Session 2	Poster Hall
9:00 PM ET/ 10 AM JST	Mix and Mingle – Optional Networking	Lobby

Thursday, June 24 / Friday, June 25

4:30 PM ET/ 5:30 AM JST	Help Desk / EPB Onboarding	Lobby
5 PM ET/ 6 AM JST	<p>MITIGATING SEA LEVEL RISE Session co-chairs: Daisuke Inazu, Tokyo University, and Firas Saleh, Risk Management Solutions</p> <p><i>Sea Level Rise Adaptation Pathways: Miami-Dade County Case Study</i> Keren Bolter, Arcadis</p> <p><i>Technologies to Characterize and Communicate Global Impacts of Sea Level Rise</i> Scott Kulp, Climate Central</p> <p><i>Hothouse in the Deep Past: Implications for Ongoing Climate Change</i> Kazutaka Yasukawa, University of Tokyo</p> <p><i>Management of CO2 in the Atmosphere and Ocean Using Solid Earth</i> Takeshi Tsuji, Kyushu University</p>	Lecture Hall
6:30 PM ET/ 7:30 AM JST	Break	
6:45 PM ET/ 7:45 AM JST	Breakout Session 1: Next Engineering Grand Challenges	Multipurpose Room
7:30 PM ET/ 8:30 AM JST	Meet and Connect Networking (shuffle)	Multipurpose Room
8:00 PM ET/ 9:00 AM JST	<p>BLOCKCHAIN Session co-chairs: Giulia Fanti, Carnegie Mellon University, and Shigeya Suzuki, Keio University</p> <p><i>Blockchain: Introduction and Challenges</i> Sreeram Kannan, University of Washington</p> <p><i>Technology and Implementation Challenges Behind Decentralized Identity</i> Kristina Yasuda, Microsoft</p>	Lecture Hall

Private Data Management for Decentralized Ledgers
Ewa Syta, Trinity College

On-Chain Scaling of Blockchain
Akihiro Fujihara, Chiba Institute of Technology

9:30 PM ET/
10:30 AM JST Mix and Mingle – Optional Networking Lobby

Friday, June 25 / Saturday, June 26

4:30 PM ET/
5:30 AM JST Help Desk / EPB Onboarding Lobby

5 PM ET/
6 AM JST **MACHINE LEARNING AND AI FOR MENTAL HEALTH** Lecture Hall
Session co-chairs: Takamitsu Matsubara, Nara Institute of Science and Technology,
and Ada Poon, Stanford University

Natural Language Processing in Medical Applications
Yoshinobu Kano, Shizuoka University

Clinical Psychoinformatics Approaches for Improving Quality of Life
Tetsuya Yamamoto, Tokushima University

Machine Learning, Sleep, Aging, and Memory
Makoto Kawai, Stanford University

6:30 PM ET/
7:30 AM JST Report out from Breakout 1: Next Grand Challenges for Engineering Lecture Hall

7:00 PM ET/
8:00 AM JST Break

7:15 PM ET/
8:15 AM JST Breakout Session 2: Session topic discussions Multipurpose Room

8:00 PM ET/
9:00 AM JST Meet and Connect Networking (shuffle) Multipurpose Room

8:30 PM ET/
9:30 AM JST Concluding Remarks Multipurpose Room

8:35 PM ET/
9:35 AM JST Mix and Mingle – Optional Networking Multipurpose Room

9:00 PM ET/
10:00 AM JST Platform closes