

# **FUTURE FOCUS:**

The Hawai'i Innovation Initiative's Forum on sustainability and resilience, including efforts to combat sea level rise and other climate change issues through science, engineering and innovation

OCTOBER 15-16, 2019 HAWAI'I CONVENTION CENTER



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# **FUTURE FOCUS:**

The Hawai'i Innovation Initiative's Forum on sustainability and resilience, including efforts to combat sea level rise and other climate change issues through science, engineering and innovation

A conference of emerging technologies, resources and opportunities available in Hawai'i's growing innovation ecosystem

October 15-16, 2019
Hawai'i Convention Center

## **TUESDAY, October 15**

### Hawai'i Convention Center

Registration and Breakfast | 7:15 - 8:00

Morning General Session | 8:00 - 12:30

**Room 323 A/B/C** 

Welcome 8:00

Donalyn Dela Cruz, Senior Vice President, 360 Strategies, emcee

Video | 8:05

University of Hawai'i Sustainability and Resilience

#### Welcome/Opening Remarks | 8:10 - 8:20

- David Lassner, President, University of Hawai'i
- Rich Wacker, President and Chief Executive Officer, American Savings Bank; Innovation Chair, Hawaii Business Roundtable

Opening Scene Setter | 8:25 - 8:40

RADM Kevin Lunday, Commander, 14th District, Coast Guard

Poolside Chat | 8:45 - 9:35

The Seas are Rising - Really? Now What?

- Ethan Allen, Associate Professor, Daniel K. Inouye Asia-Pacific Center for Security Studies
- Celeste Connors, Executive Director, Hawai'i Green Growth
- Haunani Kane, Postdoctoral Research Fellow, UH Hilo
- RADM Kevin Lunday, U.S. Coast Guard
- Moderator: Erin Hughey, Director of Disaster Services, Pacific Disaster Center Global

**TED Talk** | 9:40 - 9:55

Visualizing the Future of Renewable Energy in Hawai'i

 Jason Leigh, Professor and Director, Laboratory for Advanced Visualization and Applications, UH Mānoa

He'eia Fishpond

• Brian Glazer and Rosie Alegado, Associate Professors - Oceanography School of Ocean and Earth Science and Technology, UH Mānoa

Mini Break | 9:55 - 10:10

**Room 319 A/B** 

**Poolside Chat** | 10:10 - 11:00

Title: A Climate Change Conversation Among City Leaders

- Derek Kawakami, Mayor, County of Kaua'i
- Bryan Koon, Vice President for Homeland Security and Emergency Management, IEM; former director at the Florida Division of Emergency Management
- Marla Nelson, Professor, Planning and Urban Studies, University of New Orleans
- Josh Stanbro, Resiliency Officer, City and County of Honolulu
- Moderator: Makena Coffman, Director, Institute for Sustainability and Resilience (ISR), UH Mānoa

**TED Talk** | 11:05 - 11:25

Climathon

- George Yarbrough, Co-Director and Co-Founder Impact Hub Box Farm
  - Preston Tran, Project Manager and, Gabor Paczolay, Business and Marketing Manager

Video | 11:25

Girl Scouts of Hawai'i (GSH) STEM Program Camp Paumalu – GSH STEM Center of Excellence

Plenary Presentation | 11:30 - 12:30

Title: Artificial Intelligence is Here: What Does Future Work Look Like? Ray Shirkhodai, Executive Director, Pacific Disaster Center Global

- Cross-Interview of Students and Employers
  - Employers Paul Yonamine, Chairman and Chief Executive Officer, Central Pacific Financial Corporation and John Leong, Chief Executive Officer, Kupu
- Van Nguyen, UH Information Technology Management Graduate and Rebecca Tang, KCC Sustainability Certificate Graduate
- Moderator: Steve Auerbach, Interim Director,
   Office of Innovation and Commercialization (OIC), UH System

Mini Break and Box Lunch Pick-Up | 12:30

**Lunch/Afternoon General Session** | 12:45 - 3:05 **Room 323 A/B/C** 

**Lunch Program** | 12:45 - 2:00

• Emcee: Dennis Gibson, Chair, CyberHawaii

#### **Lunch Keynote** | 12:50 - 1:10

Title: Cyber and Data Science Career Paths Needed Now Glenn Hernandez, Director, U.S. Cyber Challenge

#### **Student Awards/Recognition** | 1:15 - 2:00

- Girl Scout Winners of CyberHawaii's Cyber Security Awareness PSA and Poster Contest
- Capture the Flag- National Online Cybersecurity Competition
  - Student/School Achievement Awards

Mini Break | 2:00 - 2:15

**Room 319 A/B** 

#### **Poolside Chat** | 2:15 - 3:05

From Tsunami, Hurricane to Cyber Disaster - How to Prepare and Respond

- Jerry Dolak, Hilton Hotels/Hawai'i Visitor Industry Association
- Karl Kim, Director, National Disaster Preparedness Training Center (NDPTC); Professor, Urban and Regional Planning, UH Mānoa
- Kevin Klein, Director, Colorado Emergency Management Agency
- Luke Meyers, Executive Officer, Hawai'i Emergency Management Agency
- Moderator: Tim Manning, President, Berglind-Manning; former deputy FEMA administrator

#### Concurrent Sessions | 3:15 - 4:05

Facing the Future - Jobs of the Future

#### **Room 321 A/B**

- Glenn Hernandez, Director, U.S. Cyber Challenge
- Alberto Gonzalez, Co-Founder, Rendezview
- Ray Shirkhodai, Pacific Disaster Center Global
- Edward Ontai, President, Data House
- Moderator: Scott Murakami, Director, Hawai'i State Department of Labor and Industrial Relations

Deeper Dive – Honolulu Team Shares Infrastructure Lessons Learned from Boston, Charleston and Miami

#### **Room 324**

- Katia Balassiano, Land Use Permits Division, Department of Planning and Permitting, City and County of Honolulu
- Chip Fletcher, Associate Dean for Academic Affairs, School of Ocean and Earth Sciences and Technology (SOEST), UH Mānoa
- Matt Gonser, Coastal and Water Program Manager, Office of Climate Change, Sustainability and Resiliency, City and County of Honolulu
- Sam Lemmo, Administrator, Office of Conservation and Coastal Lands, Hawai'i State Department of Land and Natural Resources

- Ross Sasamura, Director and Chief Engineer, Department of Facilities Management, City and County of Honolulu
- Genevieve Sullivan, Deputy Director, Hawai'i State Department of Transportation
- Barry Usagawa, Program Administrator, Honolulu Board of Water Supply
- Moderator: Makena Coffman, ISR, UH Mānoa

Case Study: Resilient Public-Private Partnership: U.S. Army – HECO 50 % Biofuels Power Generation — A Model for Others?

#### **Room 325 A/B**

- Robert Isler, Vice President, Power Supply, Hawaiian Electric Company
- Randy Iwase, former chair, Public Utilities Commission
- David Lopez, Hawai'i Emergency Management Agency
- Richard Rocheleau, Director, Hawai'i Natural Energy Institute, UH Mānoa
- Keith Yamanaka, Energy Branch Chief, U.S. Army Garrison Hawai'i
- Moderator: Marcus Oshiro, Chairperson, Hawai'i Labor Relations Board; former State Representative

#### Concurrent Sessions | 4:10 - 5:00

Disruptive Technologies in Disaster and Resiliency Management Room 321 A/B

- Dennis Furukawa, Founder and Chief Executive Officer, Real Green Power
- Erin Hughey, Pacific Disaster Center Global
- Dan Jenkins, Co-Founder/Chief Technology Officer, Diagenetix, Inc
- Bryan Koon, IEM
- Brendan Lane Larson, Co-Founder, AbsoluteClimo
- Moderator: Karl Kim, NDPTC/UH Mānoa

Baking in Cybersecurity into Resiliency Plans

#### **Room 324**

- Jason Benn, Chief Information Officer, Hawaiian Electric Company
- Matt Freeman, IT Manager, Hawaiian Telcom
- BG Moses Kaoiwi, Director of the Joint Staff, Hawai'i National Guard
- Kevin Klein, Director, Division of Homeland Security and Emergency Management, Colorado Department of Public Safety
- Nathan Peters, IT Manager, Par Pacific
- Kelly Ueoka, President, PACXA
- Moderator: Giovanni Williams, Cyber Security Advisor, U.S. Department of Homeland Security

Are We Climate Ready? Business Risks and Realities

#### **Room 325 A/B**

- Roy Amemiya, Managing Director, City and County of Honolulu
- Tim Johns, President and Chief Executive Officer, Zyphyr Insurance Company, Inc.
- Emmit Kane, Chair, Board of Trustee, Employee Retiree System, State of Hawai'i
- Rich Sorkin, Chief Executive Officer, Jupiter Intelligence
- Rich Wacker, American Savings Bank
- Moderator: Jeffrey Shonka, President and Chief Executive Officer, First Insurance Company of Hawai'i

**Reception** | 5:00 - 6:30

## **WEDNESDAY, October 16**

### Hawai'i Convention Center

Registration and Breakfast | 7:00 - 8:00

Morning General Session | 8:00 - 11:00

**Room 323 A/B/C** 

Welcome | 8:00

Donalyn Dela Cruz, emcee

Opening Scene Setter | 8:05 - 8:25

Title: An Entrepreneur's Journey

Alex Bitoun, Chief Executive Officer, Sagely; Co-Founder, Livongo

Video | 8:25

Atherton Entrepreneurial Center

Opening Poolside Chat | 8:30 - 9:20

Impact Funders - An Evolving and Expanding Opportunity

- Kirk Belsby, Partner, Finestere Ventures
- Danya Hakeem, Director of Agriculture and Circular Economy, Elemental Excelerator
- P. Noel Kullavanijaya, Principal, Equilibrium
- Scott Valentino, President, Pacific Current
- Moderator: Murray Clay, President, Ulupono Initiative

**Keynote** 9:25 - 9:45

Title: Spurring On and Protecting Inventions

John Cabeca, Director, West Coast Region, U.S. Patent and Trademark Office

**TED Talk** | 9:50 - 10:00

CarbonCure

• Robert Niven, Chief Executive Officer

**Ampaire** 

• Brice Nzeukou, Product Manager

Video | 10:00

Mana Up

**Poolside Chat** | 10:05 - 11:00

Linking Innovators and Early Adopters

- Forest Frizzell, Chief Executive Officer, Shifted Energy -- Colton Ching, Sr.
   Vice President Planning and Technology, Hawaiian Electric Company
- Frank Emura, IoT Business Project Division, Hitachi Leon Roose, Chief Technologist, GridSTART, Hawai'i Natural Energy Institute, UH Mānoa
- Megan Escamilla, Managing Director, DFS Hawai'i Dylan Butterbaugh, Founder, Mānoa Chocolate Hawai'i
- Moderator: Meli James, Co-Founder, Mana-Up

Break | 11:00 - 11:15

**Room 319 A/B** 

Concurrent Sessions | 11:15 - 12:05

Startup Roadmap

**Room 321 A/B** 

- Steve Auerbach, OIC, UH System
- Len Higashi, Acting Director, Hawai'i Technology Development Corporation
- Mike McCartney, Director, Department of Business, Economic Development and Tourism
- Shawn Moorhead, Partnerships Manager and EEx Fund One, Elemental Excelerator
- Jane Sawyer, Hawai'i Director, Small Business Association
- Moderator: Sandra Fujiyama, Innovation and Business Development Officer, UH System

Capital Comes In Many Forms

**Room 324** 

- Eric Bowman, Business Development and Services Integration Coordinator, Kohala Center
- Patti Chang, Chief Executive Officer, Feed the Hunger
- Brant Chillingworth, Senior Program Officer, Hau'oli Mau Loa Foundation
- Nick Efstratis, Managing Director, Epic Ventures
- Moderator: Omar Sultan, Managing Partner, Sultan Ventures

Indigenous Innovation and Investment

**Room 325 A/B** 

- Kawika Burgess, Chief Executive Officer and President, Kalona Brand
- Kamuela Enos, Director of Social Enterprise, Ma'o Organic Farms
- Keoni Lee, Chief Executive Officer, Hawai'i Investment Ready
- Matthew Lynch, Mauka Marketplace; Director of Sustainability Initiatives, UH System
- Moderator: Alec Wagner, Director, Purple Mai'a

#### Mini Break and Lunch Networking | 12:05 - 1:00

**Room 323 A/B/C** 

#### **Data Visualization Showcase**

**Room 319 A/B** 

- Impacts of Sea Level Rise to O'ahu Island A Flyby
- Visualization of the Future of Renewable Energy in Hawai'i
- Exploring Affordable Environmental Sensor Data
- The Kīlauea Volcanic Eruption: High-Resolution Imagery and Visualizations

#### Afternoon General Session | 1:00 - 3:10

**Room 323 A/B/C** 

**TED Talk** | 1:00 - 1:05

Studio Resilience

LiAnne Yu and Heiko Sacher, Co-Founders

Video | 1:05

**Open Power Quality** 

Poolside Chat | 1:10 - 2:00

Spotlight on Innovative Sustainability-Committed Companies

- David Bissell, Chief Executive Officer, Kaua'i Island Utility Cooperative
- Peter Fukunaga, Director, Servco/Hui Car Share
- Ian Kitajima, Director of Corporate Development, Tech Sherpa, Oceanit
- Colin Yost, Chief Operating Officer, RevoluSun
- Moderator: Derek Kurisu, Executive Vice President, KTA Super Stores

**TED Talk** | 2:05 - 2:15

3Rwater LLC

Lauren Roth Venu, Chief Executive Officer

PelagiX

Matthew Carnes, Founder

Video | 2:15

Hohonu

**Poolside Chat** | 2:20 - 3:10

Designing for the Future - Harden, Adapt and Mitigate

- Steve Cayetano, Deputy District Engineer, Programs and Project Management, U.S. Army Corps of Engineers
- Jeff Overton, Principal, G70
- Josh Stanbro, City and County of Honolulu
- Lance Wilhelm, President, The Wilhelm Group, LLC
- Davis Yogi, Administrator, Harbors Division, Hawai'i State Department of Transportation
- Moderator: Brennon Morioka, Dean, College of Engineering, UH Mānoa

Concurrent Sessions | 3:20 - 4:10

Deeper Dive – Ala Wai Flood Control and Mitigation Initiative Room 321 A/B

- Jeff Herzog, Project Manager, U.S. Army Corps of Engineers
- Robert Kroning, Department of Design and Construction, City and County of Honolulu
- Newton Parks, Co-Founder, Akabotics
- Sterling Yee, Director, Strategic Projects, Oceanit
- Moderator: Julius Fischer, Project Coordinator, Ala Wai Watershed and Sustainability Business Forum, Hawai'i Green Growth

Case Study on Coastal Erosion – North Shore of Oahu
Room 324

- Oceana Francis, Associate Professor, College of Engineering, UH Mānoa
- Chad Goodfellow, Chief Executive Officer, Goodfellow Bros. LLC
- Sean Quinlan, Representative District 47, Hawai'i State Legislature
- Ed Sniffen, Deputy Director, Highways Division, Hawai'i State Department of Transportation
- Moderator: Sam Lemmo, Administrator, Hawai'i State Department of Land and Natural Resources

Closing Remarks | 4:15

**Room 323 A/B/C** 

NOTE: Program, speakers and times are subject to change



## **Our Keynote Speakers/Scene Setters**

# Alex Bitoun Chief Executive Officer, Sagely

Co-Founder, Livongo



Alex Bitoun is currently leading Sagely, a digital health company focused on keeping kupuna happy, healthy, connected and independent. He is now focused on expanding Sagely's suite of successful products for senior communities to start offering a completely new approach to address the needs of our growing elder population that combines the latest technology with coaching and mentoring.

Bitoun has been heavily involved with technology in the healthcare space—working with health providers, hospitals, insurance groups, and health consumers—giving him valuable expertise of the various aspects of healthcare delivery.

Co-founder of EosHealth now Livongo (NASDAQ:LVGO), Trilliant Technology Group, and an early member of the upper management team of Diabetes America, Bitoun has been on the cutting edge of bringing technology to healthcare delivery for the past fifteen years.

In 2008, he co-founded EosHealth (rebranded as Livongo Health in 2014, and now on the NASDAQ:LVGO) and served as Chief Technology Officer to develop a new platform going beyond traditional disease management, allowing patients living with chronic conditions to aim for better health.

## John Cabeca

Director of the West Coast Region for the United States Patent and Trademark Office



As the Director of the West Coast Region for the United States Patent and Trademark Office (USPTO), John Cabeca carries out the strategic direction of the Under Secretary of Commerce for Intellectual Property and Director of the USPTO, and is responsible for leading the USPTO's west coast regional office in Silicon Valley. Focusing on the region and actively engaging with the community, Cabeca ensures the USPTO's initiatives and programs are tailored

to the region's unique ecosystem of industries and stakeholders.

A veteran of the U.S. Patent and Trademark Office for over 26 years, Cabeca previously served as the senior advisor to the Under Secretary of Commerce for Intellectual Property and Director of the USPTO. In this role, he worked closely across the Agency's leadership to implement the policies and priorities for the USPTO. He began his career at the USPTO as a patent examiner after graduating from Widener University with a bachelor's degree in electrical engineering. Cabeca became a supervisory patent examiner in 1997 and joined the Senior Executive Service in 2008 serving as a patent technology center director over the semiconductor and electrical systems technologies.

Cabeca has dedicated much of his career to the USPTO's outreach and education programs focusing on small businesses, startups and entrepreneurs. Over the years, he served in the Office of Petitions, the Office of Patent Legal Administration, the Office of Governmental Affairs and the Office of the Under Secretary. In 2006, Cabeca was appointed a Department of Commerce Science and Technology Fellow and served on special assignment to the Executive Office of the President in the United States Trade Representative's Office. At USTR, he worked with multiple agencies on a variety of international intellectual property rights issues and played an integral role in the Free Trade Agreement negotiations with the Republic of Korea.

## **Glenn Hernandez**

National Director - U.S. Cyber Challenge



Glenn Hernandez is passionate about creating strategic partnerships to revolutionize organizational transformation with resilient technology and talented professionals to meet mission objectives.

Hernandez served over 26 years in the U.S. Coast Guard and retired in July 2017. From 2013-2017, as the Coast Guard's Chief Information Security Officer, he co-authored

the Coast Guard's Cyber Strategy and led the Coast Guard's first-ever Cyber crisis response based on the National Incident Management System framework. He has extensive experience with maritime operations, systems engineering, major acquisitions, cyber strategy and policy development.

Hernandez has a Bachelor of Science degree in electrical engineering from the U.S. Coast Guard Academy and a Master of Science degree in electrical engineering from the U.S. Naval Postgraduate School. He has represented the United States on many official delegations internationally as a recognized technical subject matter expert to the United Nations Specialized Agency, International Maritime Organization, several intergovernmental organizations, and multilateral safety and security forums.

A few of his distinguished awards include the Legion of Merit, Defense Meritorious Service Medal, first U.S. Coast Guard recipient of the Army's Military Intelligence Corps Association's Lieutenant Colonel Thomas Knowlton Medal, AFCEA International Leadership and Meritorious Service Awards, and the 2018 (ISC)2 Information Security Leadership Award for Government Strategy and Policy. Hernandez is a Certified Information Systems Security Professional (CISSP).

## Rear Admiral Kevin E. Lunday

Fourteenth District Commander (D14) - U.S. Coast Guard



Rear Admiral Kevin E. Lunday assumed the duties as commander of the Fourteenth Coast Guard District in July 2018. He is responsible for directing Coast Guard operations throughout Oceania, including Hawai'i, Guam, the Commonwealth of Northern Mariana Islands, American Samoa, and activities in Singapore and Japan.

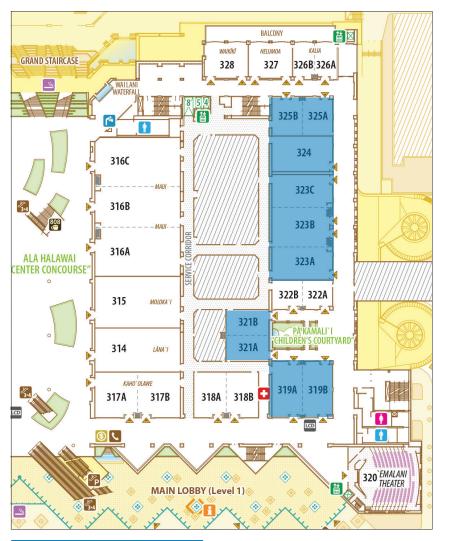
Prior to reporting to District 14, Lunday served as the commander of Coast Guard Cyber Command, an operational

command reporting to the commandant and a joint Service Cyber Component of U.S. Cyber Command. In that role, he directed the operation and aggressive defense of Coast Guard networks, the delivery of operational effects in and through cyberspace to enable Coast Guard operations in all domains, and directed operations in cyberspace to protect maritime critical infrastructure. He also served as the assistant commandant for C4IT, responsible for policy, management and oversight of Coast Guard C4IT operational, business and infrastructure assets.

From 2014 to 2016, Lunday served as the director of Exercises and Training (J7), U.S. Cyber Command, where he was responsible for the joint training of the Cyber Mission Force and delivery of trained and ready cyberspace forces for the Department of Defense. Other prior assignments include commanding officer of Coast Guard Maritime Intelligence Fusion Center Atlantic and the executive assistant to the 24th Commandant.

Lunday is a Distinguished Graduate of the National War College with a Master of Science in national security strategy and a graduate of the Naval War College (College of Command and Staff). He holds a Juris Doctor from George Washington University Law School and Bachelor of Science in marine engineering from the U.S. Coast Guard Academy.

## Hawai'i Convention Center Meeting Rooms





### **CONFERENCE ROOMS**

Main Room 323A/B/C

Breakout Rooms 321A/B

324 325A/B

Exhibits/

Reception 319A/B

NOTE: Rooms, program, speakers and times are subject to change

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