# VOL 60 NO.7 SERVING 2000 ENGINEERS

# THE STATE OF THE COLLEGE OF ENGINEERING

On August 26, 2024, the College welcomed back nearly 1,500 students to campus for the start of the fall semester. A large class of new incoming students attended the Engineering Blueprints Orientation the week prior and brought with them fresh energy and excitement for the school year.

#### SAVE THE DATE!

Join the College for the following events in fall 2024. You may learn more about these and other events by visiting eng.hawaii.edu/ allevents/.

Leadership Seminar Series, presented by the Hayashida Family – join us for these 1-hour hybrid in-person/virtual conversations with inspirational local leaders each month. September 6: Kurt Matsumoto; October 11: Shelee Kimura; November 1: Sutanto Sudiro Widjaja; December 6: Rich Matsuda.

**Engineering Career Expo** – Friday, September 20 from 1:00-4:00 pm at Campus Center. Students and alumni may register to participate through the above event website.

**Holmescoming** – Friday, October 18 from 5:00 – 8:30 pm at the Stan Sheriff Center.

**Discover UH Mānoa Open House** – Saturday, October 26 from 10:00 am to 1:00 pm. Tour labs and attend events across campus.

**Fall Convocation** – Friday, December 20 at 5:30 pm at UH Kennedy Theatre.

#### FACULTY & STAFF

New faculty – The College of Engineering is pleased to announce **17 new faculty** have



Over the summer, 18 high school students participated in the Junior Engineers Summer STEM Experience (JESSE), an internship program (read more on page 7)

chosen to join our 'ohana in the 2024-2025 Academic Year, seven of them starting in fall 2024. Read on for highlights from the past academic year.

#### SEPTEMBER 2023:

Sayed Bateni and Jonghyun Harry Lee were two of ten faculty across the U.S. selected



Narayana Santhanam and fellow UH researchers established a cross-disciplinary data science training program which received a five-year \$3 million award.

to receive NSF research fellowships to further the knowledge of flooding risks across the globe to better respond when disaster strikes.

**Narayana Santhanam** and fellow UH researchers established a cross-disciplinary data science training program that received at five-year, \$3 million NSF Research Traineeship Award. The new innovative graduate program brings together engineering, computer science, social science, business and medicine to harness the power of data science.

#### OCTOBER 2023:

**Tyler Ray's** 3D-printed wearable sweat sensor that can detect a variety of health conditions in real-time has been recognized as one of the world's most promising healthcare innovations of 2023 according to IN-PART, a platform that connects the industry with innovative impactdriven technologies in academia.

#### NOVEMBER 2023:

Amarjit Singh chaired a 4-day international legal affairs and dispute resolution workshop hosted at UH and organized by the Journal of Legal Affairs and Dispute Resolution in Engineering and Construction and the Construction Institute of the American Society of Civil Engineers.

lan Robertson was the lead author of the NHERI (Natural Hazards Engineering Research



Published monthly by: HAWAII COUNCIL OF ENGINEERING SOCIETIES

#### ADDRESS ARTICLES FOR PUBLICATION TO: MANAGEABILITY, LLC 643 Ilalo Street, Suite 204 • Honolulu, HI 96813 Email: wiliki@manageability.pro

#### WILIKI MAILING LIST

Additions and/or corrections to the Wiliki mailing list should indicate the proper society, institution or association. Corrections to email addresses should be submitted to your society coordinator.



| HOME PAGE: ho<br>EMAIL: hcesorg( |                   |             |
|----------------------------------|-------------------|-------------|
| 2024-2025 OF                     | FICERS            |             |
| Chair:                           | Lindsay Nakashima |             |
| Vice-Chair:                      | Kathleen Chu      |             |
| Secretary:                       | Vacant            |             |
| Treasurer:                       | Michelle Manuel   |             |
| Past Chair:                      | Kristen Yoshida   |             |
| SOC                              | Representative    | Alternate   |
| AACE                             | C. Baze           |             |
| ACECH                            | G. Masuda         |             |
| APWA                             | R. Char           |             |
| ASCE                             | E. Arakawa        |             |
| ASHRAE                           | D. Kishi          | S. Nakamura |
| ASME                             | A. Siu Ho         | D. Sato     |
| EAH                              | S. Gillie         |             |
| FALEA                            | M. Stevenson      |             |
| HSPE                             | M. Kamaka         | K. Kunemine |
| HWEA                             | R. Babcock        |             |
| IEEE                             | R. Wubbens        | M. Sahara   |
| ITE                              | W. Yamamoto       | J. Thomas   |
| SAME                             | L. Wong           |             |
| SEAOH                            | K. Hashimoto      |             |
| SFPE                             | S. Dannaway       |             |
| SWE                              | K. Yoshida        |             |
| UHM CoE                          | S.K. Choi         |             |
|                                  |                   |             |



#### HAWAII CHAPTER OFFICERS

President: Chris Pruitt, PE Coffman Engineers Vice President: Robert Suster, PE InSynergy Engineering Secretary: Jordon Kilbey, PE US Army Corps of Engineers Treasurer: Sam Dannaway, PE Coffman Engineers

# DEADLINE FOR WILIKI IS SEPTEMBER 15TH



Hawaii Section — Younger Member Forum Web site: http://www.ascehawaii.org/ymf.html

#### 2023-2024 YMF Officers

Lance Lam, President

- president.ascehawaiiymf@gmail.com Rebecca Pitts, Vice President
- vicepresident.ascehawaiiymf@gmail.com John Kim, Treasurer
- treasurer.ascehawaiiymf@gmail.com Christine Mau, Secretary
- secretary.ascehawaiiymf@gmail.com Brandon Uejo, Past-President
- pastpresident.ascehawaiiymf@gmail.com

#### YMF GENERAL MEETING

The next YMF general meetings will be inperson on Wednesday, September 4, 2024, at 6:00PM and Wednesday, October 2, 2024, at 6:00PM. Please check our website, social media channels, or weekly eblast for the latest information on our upcoming general meetings and events. If you are interested in attending and learning more about the various professional, social, and service opportunities available through YMF, please contact YMF at *ymf.hawaii@gmail.com*.

#### VICTAULIC VOLLEYBALL TOURNAMENT BY JAREN IWASA

On Saturday, July 13, Victaulic organized the 1st Annual Engineers vs Contractors Volleyball Tournament. 11 YMF members competed against other engineering and contractor companies. Thank you to Victaulic for hosting the event and the YMF members for a good showing

#### KAHA NATIVE PLANT GARDEN BY LAUREN HILL AND MEAGAN NAKAMOTO, COMMUNITY SERVICE CHAIRS

On July 27th ASCE Hawaii YMF members volunteered at Kaha Native Plant Garden. YMF members along with other volunteers helped to remove invasive weeds, plants, and any debris. Before we started working we learned about the plants in the garden and their many uses. We also got to see the marsh and the native birds that live there. Thank you to all the volunteers who helped out

#### BAYVIEW GOLF COURSE BY ZACHARY CHANG, GOLF ACTIVITIES CHAIR

On Saturday, August 3, 2024, ten YMF members set out to Bayview golf course for some friendly competition. After the 18-hole-round, we went to recharge at Jolene's to eat some ono grinds. This concludes our 2024 golf events! Thanks to everyone who came out this year!



#### ASCE YMF JOB SHADOW PROGRAM

The Job Shadow Program is looking for students and industry professionals interested in becoming a mentee/mentor. Your interest and participation in this program will provide a valuable experience that will help guide students toward a successful path beyond graduation! If you have any questions and/or want to sign up\*, please email the Job Shadow Program directly at ymfhawaii.jobshadow@gmail.com

\*Note: Information collected will help the Job Shadow Program pair mentor(s) and mentee(s) up based on their experience and interest.

#### 2024 PE EXAM UPDATE

The PE Exam is now computer-based, with appointments available year-round at Pearson VUE test centers. Information about how to register for the exam can be found on the YMF website: https://ascehawaiiymf.org/ pe-exam-information

#### **ONLINE PE REFRESHER COURSE**

The Hawaii YMF has partnered with Pathceed, an online PE Exam refresher course that covers the breadth portion of the civil engineering exam. This course features 12-hours of ondemand course materials that may be accessed for a 6-month period and a one-time free access should you not pass the exam. Curious, but want a sample of the course? You can check out a free 1-hour lesson before committing to the program! The course cost is \$289, and we offer ASCE Hawaii YMF members a \$40 discount when registering. If you are interested in signing up for this course, please contact us at ymf808. pecourse@gmail.com for more information.

The Hawaii YMF has also partnered with Engineering Education & Training (EET). EET is one of the most popular online PE Exam prep courses for all disciplines. YMF members will have a chance to receive a group discount between 5-10% on EET's on-demand and live webinar classes. If you intend to or already signed up for the 2024 June-August Courses live seminar or have an active on-demand subscription, please contact *ymf808.pecourse@gmail.com* to fill out our form. If you have any questions, please contact us at *ymf808.pecourse@gmail.com*.



| 2023-2024 AS | CE Hawaii Section Officers        |
|--------------|-----------------------------------|
| President:   | Eric Tomishima, P.E.              |
|              | email: etomishima@ascehawaii.org  |
| PresElect:   | Sheila Uyeoka, P.E.               |
|              | email: suyeoka@ascehawaii.org     |
| Vice Pres.:  | Steven Doo, P.E.                  |
|              | email: sdoo@ascehawaii.org        |
| Treasurer:   | Amanda Waki, P.E.                 |
|              | email: awaki@ascehawaii.org       |
| Secretary:   | Norman Leong, P.E.                |
|              | email: nleong@ascehawaii.org      |
| Past Pres.:  | Reyn Hashiro, P.E.                |
|              | email: rhashiro@ascehawaii.org    |
| YMF Pres.:   | Lance Lam, P.E.                   |
|              | email:                            |
|              | president.ascehawaiiymf@gmail.com |

#### **EXECUTIVE COMMITTEE MEETING**

Last held: August 6, 2024

Presented by

Next meeting: September 10, 2024

#### ASCE HAWAII SECTION DINNER MEETING

We will keep you informed via e-blasts and/or notices posted on our website at ascehawaii.org with the next dinner meeting information and schedule. Cost: (RSVP via Eventbrite)

#### **OUTSTANDING CIVIL ENGINEERING** ACHIEVEMENT (OCEA) AWARDS

The American Society of Civil Engineers (ASCE) Hawaii Section requests the pleasure of

your company at the 2024 Hawaii Outstanding **Civil Engineering Achievement Awards Banquet** on Thursday, September 26, 2024 at The Kahala Hotel and Resort. Please join us in recognizing the outstanding civil engineering accomplishments of Hawaii's design and construction professionals. Please be on the lookout for the ASCE email with the invitation form. For more information on the awards banquet, please contact Norman Leong at nleong@ascehawaii.org or Dayna Nemoto-Shima at dnemoto@ascehawaii.org.

#### **OFFICER ELECTIONS**

The ASCE Hawaii will be holding elections for its officers. Hawaii Section members will be able to vote on the following positions: President-Elect, Vice President, Treasurer, Secretary, and YMF President (only YMF members can vote for YMF President).

#### **COMMITTEE POSITIONS**

ASCE Hawaii is looking for volunteers for various committee positions, including Advocacy Captain, Report Card Committee Members, and Water Resources Chairperson. If you are interested or have questions on any of these positions, please contact President Eric Tomishima, etomishima@ascehawaii.org.

#### ASCE HAWAII SECTION STUDENT SCHOLARSHIPS

Please help us increase our scholarship endowment so that we can recognize deserving students. We continue to accept tax-deductible donations with the goal of increasing the annual scholarships. Make your check payable to 'ASCE Hawaii Section' and include the note 'Walter Lum Scholarship

Fund' and mail to: ASCE Hawaii Section. P.O. Box 917, Honolulu, HI 96808-0917. If you have any questions, please contact Steven Doo at sdoo@ascehawaii.org.

#### ASCE JOB LISTINGS

The following job listings are currently posted on the ASCE Hawaii Section website:

- County of Hawaii, Department of Environmental Management Wastewater Division (Civil Engineer I-IV)
- Oceanit (Civil Designer or Senior Civil Designer)

For further information, please visit

http://www.ascehawaii.org/job-listings.html



Website: hawaii.apwa.org

| 2024 Officers   |             |
|-----------------|-------------|
| President       | Rouen Liu   |
| Vice-President  | Dawn Szev   |
| Treasurer       | Trevor Vag  |
| Secretary       | Maile LaFa  |
| Past President  | Tyler Sugih |
| Delegate        | John Lame   |
| Awards Director | vacant      |
| Events Director | Jon Young   |
| Membership      |             |
| Director        | Robert Prir |
| Historian       | Lester Fuk  |

wczyk gay ave hara er

miano uda



OCT

2024

Exhibit space and sponsorship opportunities available.

Hawai'i Convention Center

(O)

(F)

in



Scan for more info

AIA Honolulu





Institute of Electrical and Electronic Engineers The IEEE is the world's largest technical organization dedicated to advancing technology for the benefit of humanity.

Website: r6.ieee.org/hawaii

### **IEEE Hawaii Section**

| 2024-2025 Officers |                |  |
|--------------------|----------------|--|
| Chair:             | Brianne Tengar |  |
| Vice Chair:        | Matthew Sahar  |  |
| Secretary          | Quynh Tran     |  |

a Treasurer: Wayne Layugan Past Chair Roxanne Birch

#### **IEEE EXECUTIVE COMMITTEE (EXCOM)** MEETING

Last meeting: August 8th, 2024 Next meeting: September 5th, 2024 Register here:

events.vtools.ieee.org/m/425780

For a full list of upcoming events, visit r6.ieee.org/hawaii/events

#### **CAREERS IN TECHNOLOGY - SUMMER** SERIES 2024

This series of events will allow attendees to experience a diverse range of topics within the information technology sector from engaging industry professionals.

These sessions are open to everyone. Audiences in the past have included students, professionals from various STEM disciplines, retirees, as well as individuals transitioning into the technology sector from other career fields.

Register here:

events.vtools.ieee.org/m/423707

#### DATA-DRIVEN BATTERY DIAGNOSIS AND **PROGNOSIS: HNEI BATTERY WORK**



Accurate lithium battery diagnosis and prognosis are critical to increasing the penetration of electric vehicles and grid-tied storage systems. They are both complex due to the intricate, nonlinear, and path-dependent nature of battery degradation. Data-driven models are anticipated to play a significant role in the behavioral prediction of dynamical systems such as batteries. However, they are often limited by the amount of training data available.

This seminar will showcase HNEI's approach for diagnosis and prognosis from new theoretical concepts to the generation of comprehensive big-data synthetic datasets to train machine learning algorithms.

Please register at this link: https://lnkd.in/dGNQfn3z



On July 18, the IEEE Hawaii Young Professionals and Central Pacific Bank held Part 1 of the 3-part Financial Seminar Series.

Date: August 20, 2024

Time: 10:00 AM - 12:00 PM (UTC -10:00)

Location: POST 121 Conference Room,

1680 E West Rd, Honolulu, Hawaii 96822

#### **IEEE JOB LISTINGS**

The following jobs are currently listed on the IEEE Job Board.

Bishop & Company - Electrical Engineering For job listings, visit r6.ieee.org/hawaii/jobs Want to post a job? r6.ieee.org/hawaii/post-a-job

#### MASTERING YOUR MONEY: ESSENTIAL **STEPS FOR FINANCIAL SUCCESS IN** YOUR 20S & 30S

On July 18th, The IEEE Hawaii Young Professionals (YP) and Central Pacific Bank held Part 1 of the 3-part Financial Seminar Series. In the Mastering Your Money: Essential Steps for Financial Success in Your 20s &30s, Jason Mukaida spoke about financial planning, managing credit cards, and navigating retirement plans. After the event, the Society of American Military Engineers (SAME) Honolulu Post Young Professionals sponsored a pau hana at Ferguson's. Thank you to IEEE Young Professionals for sponsoring the Financial Seminar Series! Stay tuned for Part 2!



#### **KAPILI MAUI FUNDRAISER PAU HANA**

The IEEE Hawaii Section teamed up with the American Council of Engineering Companies Hawaii (ACECH), Hawaii Water Environment Association (HWEA), American Society of Civil Engineers (ASCE) Hawaii Section, American Water Works Association (AWWA-HI) Hawaii Section, Hawaii Society of Professional Engineers (HSPE), Structural Engineers Association of Hawaii (SEAOH), and Society of Fire Protection Engineers (SFPE) Hawai'i Chapter to hold a Kapili Maui Fundraiser Pau Hana at Beer Lab Beretania. Over 90 people

attended for an evening of good pupus and opportunities to network with fellow industry colleagues and friends while supporting communities affected by the Maui Wildfires.

Thank you to everyone for helping us reach our fundraising goal!



CONGRATULATIONS ON ACHIEVING **IEEE SENIOR MEMBER STATUS** 

On behalf of the IEEE community, the IEEE Hawaii Section is pleased to recognize three members recently elevated to Senior Member.



Guohui Zhang

Guohui Zhang is a Professor in the Department of Civil and Environmental Engineering at the University of Hawaii at Manoa. His research focuses on Cyber-transportation system, traffic detection, intelligent transportation systems, and smart city. He published more than 100 academic papers in the top internationally circulated journals, and presented his contributions in the most prestigious international conferences. Dr.

Zhang has served as a Conference Program Co-Chair for the First and Third Annual IEEE International Smart City Conference in 2015 and 2017; an Associate Editor for the International IEEE Conference on Intelligent Transportation Systems (2011-present). He has been an Associate Editor for the Journal of Intelligent Transportation System, ASCE Journal of Transportation Engineering, Transportation Research Interdisciplinary Perspectives, Multimodal Transportation; and has served as a reviewer for about 60 academic journals in his research fields. He has delivered more than 150 technical talks and presentations at well-recognized international academic conferences or symposiums. Dr. Zhang received numerous awards, including ASCE Follow, 2021 International Academy, Research, and Industry Association (IARIA) Best Paper Award, 2019 Transportation Research Board Best Young Researcher Paper Award, 2018 and 2022 College of Engineering Faculty Research Awards at the University of Hawaii at Manoa, and 2017 Transportation Research Board Greenshields Paper Award.



#### Vincent Attenasio

Vincent Attenasio has spent over 20 years delivering challenging Radio Frequency (RF) circuits and systems to the defense community from the initial concept through to the development and production of fieldable systems. My areas of expertise include RF, microwave, analog, and high-speed mixed signal circuit and system design; channel modeling and Link Budgets; system integration and troubleshooting; project & program management; risk mitigation.



#### Quynh Tran

Quynh Tran joined the Hawai'i Natural Energy Institute (HNEI) in June 2019 as a Postdoctoral fellow after completing her Ph.D. in Electrical Engineering from University of Palermo, Italy. Currently, she works as a Power System engineer II, focusing on studying the production cost model for power systems, specifically

exploring the integration of renewable energy resources. She's also participating in the research and development of advanced power systems solutions to facilitate the seamless grid integration of renewable energy, with a strong emphasis on achieving efficiency, security, reliability, and resilience in grid operations. Throughout her career, she has authored or coauthored more than 30 papers published in various reputable journals and presented at conferences in these fields. Achieving Senior Member status reflects Quynh's substantial contributions to the field over 15 years. This elevation is not only a testament to her technical expertise and leadership but also an acknowledgment of her dedication to advancing the engineering profession and supporting the broader IEEE community.

We look forward to their continued success and future contributions to the field.



P.O. Box 4135, Honolulu, Hawaii 96812 Website: http://www.falea.org

#### 2024 OFFICERS and DIRECTORS

President: Ferdinand B. Guinto Secretary: Majella D. Stevenson Joel L. Francisco Treasurer Public Relations Officer: Maricel O. Guinto Immediate Past President: Gene C. Albano, Jr. Directors: Angelie L. Armas Riza Marie R. Gatdula-Cao Maritez A. Marquez Joey G. Resurreccion Elvi P. Sutherland Roger A. Urbi



ACEC Hawaii Website: www.acechawaii.org

#### 2024-2025 Board of Directors

| 2024-2025 60 | and of Directors                     |
|--------------|--------------------------------------|
| President:   | Shannon Holman                       |
|              | Orion Engineers & Associates         |
| Pres. Elect: | Charles Jury                         |
|              | Okahara and Associates, Inc.         |
| Treasurer:   | Kealohi Sandefur                     |
|              | Yogi Kwong Engineers, LLC            |
| Secretary:   | Timothy Goshi                        |
|              | KAI Hawaii, Inc.                     |
| Nat. Dir.:   | Nimr Tamimi                          |
|              | Engineering Partners                 |
| Past Pres:   | Kyle Kaneshiro                       |
|              | The Limtiaco Consulting Group        |
| Director:    | George Takase                        |
|              | Ronald N.S. Ho & Associates          |
| Director:    | Dayna Nemoto-Shima                   |
|              | Pacific Geotechnical Engineers, Inc. |
| Director:    | Simone Simbeck                       |
|              | Haley & Aldrich                      |
|              |                                      |

#### SEPTEMBER GENERAL MEMBERSHIP MEETING ON SEPTEMBER 4

Interested in becoming more involved with ACEC Hawaii? Join a committee as a member or

a chair/vice chair at our "Committee Rush" Pau Hana, which will take place at our next General Membership Meeting at the Oahu Country Club on Wednesday, September 4, from 5 p.m. to 7 p.m. The meeting is open to all ACECH firms and free for ACECH members. Registration includes pupus and two drink tickets. Stay tuned for more event details and registration at *https://acechawaii.org/september-gmm/*.

#### ACEC 2024 FALL CONFERENCE FROM OCTOBER 20-23

Registration is now open for ACEC's upcoming 2024 Fall Conference, which will be held in New Orleans from October 20 to 23. This is an amazing opportunity to attend informative sessions with keynote speakers, participate in timely education sessions, and network with fellow industry professionals. Register now at *https://conference.acec.org/.* 

#### ACECH SURVEY: CODE COMPLIANCE REVIEW OF PLANS AS IT RELATESS TO HB1758 HD1 SD1 (2024) RESULTS

ACEC Hawaii recently conducted a survey to gain input from its members on the legislative inquiry: "Does code compliance review of plans for construction, applicable to the specific engineering field, constitute 'lawful experience in engineering work' as it relates to the eligibility for licensure as a professional engineer under HRS Chapter 464?" This relates to the bill HB1758 HD1 SD1 (2024), which seeks clarification on this matter.

The survey results showed that 21 members responded "Yes" to the question, and 31 responded "No." In total, 27 member firms were represented in the survey results.

Mahalo to everyone who participated.



#### ASME-HI 2024-2025 Officers

| Email: ASMEHa | waii@gmail.com         |
|---------------|------------------------|
| Section Chair | Abel Siu               |
| Vice-Chair    | Raymond Liu            |
| Treasurer     | Kevin Dang             |
| Secretary     | Derek Sato             |
| Members-at-   |                        |
| Large         | Ed Chang, Justin Souza |

#### NEXT MEETING

Our next meeting is tentatively scheduled in mid September 2024. Please contact us if interested.

#### **REQUEST FOR SPEAKERS AND TOURS**

ASME welcomes guest speakers to present during our general meetings. Also, ASME would like to ask the membership if they can sponsor a tour of their business. If interested in presenting or offering tours, please contact ASME.

# WILIKI ADVERTISERS WANTED!



2540 Dole Street, Holmes Hall Honolulu, Hawaii 96822

#### UHM College of Engineering Deans and Chairs

| Bound and one  |                  |
|----------------|------------------|
| Dean           | Brennon Morioka  |
| Associate Dean | Steven M. Durbin |
| Assistant Dean | Song K. Choi     |
| CECE Chair     | Phillip Ooi      |
| ECE Chair      | Wayne Shiroma    |
| ME Chair       | Joseph J. Brown  |
| HAWTI Dir.     | Magdy Iskander   |
|                |                  |

#### "THE STATE OF THE COLLEGE OF ENGINEERING" CONTINUED FROM PG. 1

Infrastructure) Science Plan, Third Edition. This guide offers practical research approaches to mitigate losses due to wind, floods, earthquakes and fires, ultimately designing safer structures.

**Sayed Bateni** was featured in Civil Beat for his leadership in developing an AI system to improve fire forecasting. His work is funded by FEMA and the Hawaii Emergency Management Agency.

#### DECEMBER 2023:

In the aftermath of the Maui wildfires, **Tao Yan** received a \$250K USDA grant to investigate the abundance of chromium, an element that can become toxic when heated, in the Maui wildfire-impacted soil and develop cost-effective and practical bioremediation strategies.

#### JANUARY 2024:

**Woochul Lee** earned a five-year, \$546,503 National Science Foundation (NSF) CAREER award for his project, "Thermal Transport in Polymer Nanofibers under Strain Modulation."

The NSF CAREER Award is one of the National Science Foundation's most prestigious recognitions, specifically designed for early-career faculty members.

#### FEBRUARY 2024:

**Tianlu Wang** presented his research on underwater robotics to combat plastic pollution to the International Telecommunication Union (ITU), the United Nations' not-forprofit specialized agency for information and communication technology as part of ITU's Artificial Intelligence for Good Global Summit.

**Zhiyue Wang** and collaborators from several other universities received a \$650K NSF grant to develop wastewater management technologies tailored to island environments.

#### MARCH 2024:

The CoE was one of the first UH Mānoa units to engage in the university's two-year initiative to become a Native Hawaiian Place of Learning. A total of 13 units comprise the first cohort of UH Mānoa units, called "Cohort Kumukahi."

#### MAY 2024:

Hi Chang Chai awards for excellence in teaching, as selected by the year's graduating seniors, were given to **Phillip Ooi** (CECE), **Aaron Ohta** (ECE) and **Tyler Ray** (ME).

Tao Yan co-authored a study showing that chlorine mixed with petroleum in water can



The Engineering Peer Advisors, a dedicated team consisting of Janelle Carlos, Treyton Loo, and Misi Unutoa.

potentially produce inadvertent byproducts harmful to human health.

**Sayed Bateni** is the principal investigator working to develop a new wildfire forecast system using artificial intelligence for the state of Hawai'i to enhance public safety, preparedness and risk mitigation. The project is supported by a \$1-million grant from the Hawai'i State Legislature.

**Phillip Ooi** was awarded the prestigious Arthur N.L. Chiu Distinguished Professorship Endowment in Engineering.

#### JUNE 2024:

**Xiyu Du** and a team of researchers from Harvard University, Google and OpenAI created a new computational toolbox to lead to advancements in synthetic living matter.

#### JULY 2024:

A groundbreaking project led by **Yi Zuo** to study the impact of microplastics on respiratory health has earned a three-year, \$352,126 grant from NSF.

#### **STUDENTS & GRADS**

#### SEPTEMBER 2023:

Kaylee Clark, a postdoctoral researcher in the Ray Research Group mechanical engineering lab, was announced as a fellow in the inaugural cohort of Patents2Products, a one-year mentorship and training program through the UH Office of Innovation and Commercialization that seeks to translate innovative ideas into meaningful commercialization opportunities. Clark will receive support for her project, "A Wearable Sensor for Detecting Drug-Facilitated Sexual Assault Drugs."

#### OCTOBER 2023:

The first prototype of Pono, a computing and dynamic tasking hosted payload developed by Privateer, completed environmental testing at the UH over the summer. Undergraduate students, faculty, and staff at the **Hawai'i Space Flight Laboratory** (HSFL) partnered with Privateer, a local company with headquarters in Maui, to assist with testing their payload.

#### NOVEMBER 2023:

NASA named UH Engineering graduate Dr. **Evan Kawamura**, as the recipient of the prestigious 2023 Ames Honor Award for Best First Paper. His paper, "Extremal Control and Modified Explicit Guidance for Autonomous Unmanned Aerial Vehicles," aims to enhance drone efficiency and autonomy by improving navigation and control for various tasks using a new control method, and stood out among more than 130 nominated works.

#### DECEMBER 2023:

In response to the Maui wildfires, UH engineering and architecture students embarked on two days of field visits to Maui to learn from renowned disaster relief architect Shigeru Ban from Japan and to help build a sustainable emergency shelter in support of the Lahaina Jodo Mission.

#### JANUARY 2024:

Engineering student shop techs launched a YouTube series in fall 2023 featuring tutorial videos on how to use the different machines and software in the college's FabLab—a maker space designed for students to fabricate their designs.

Civil engineering students participated along with others in a weekend overnight field school on Moku o Lo'e (Coconut Island) to examine the intersection of environmental stewardship, interdisciplinary collaboration, and the pressing issue of sea-level rise due to climate change.

#### FEBRUARY 2024:

Three CoE students were featured in the 5-minute film Growing Self-Confident STEM Students, produced by Native Science Report with support from a NSF grant, which spotlights the experiences of Native students pursuing pre-engineering, engineering and geoscience degrees at several tribal and Indigenous-serving institutions, including UH Mānoa.

**Dylan Sodetani** was named the HCES Student of the Year.

#### MARCH 2024:

CoE students participated in a demonstration of cutting-edge technology at the Pacific Operational Science and Technology (POST) Field Experimentation (FX) event, an event run in partnership with the DoD that featured autonomous surface vehicles, remote sensors and solar-powered water purifiers.

#### **APRIL 2024:**

The Engineering Peer Advisors, a dedicated team consisting of Janelle Carlos, Treyton Loo, and Misi Unutoa, were honored with the prestigious team award at the annual Student Employee of the Year awards. This is the third year in a row that the College of Engineering has won this award—following back-to-back wins for the Engineering Student Ambassadors, who were also nominated this year, along with the CoE's FabLab team.

#### MAY 2024:

Outstanding Graduating Senior Awards were given to **Koby Kosaki** (CECE), **Dylan Sodetani** (ECE), for his innovative contributions and academic excellence, and Logan Makana Onzuka (ME).

Outstanding Graduate Student Awards were given to **Shaun Anthony Corpuz** will be presented (MS Student), **Min Ki Jeon** (PhD Award) and **Jonathan Itokazu** and **Mostafa Abdelhafeez** (Teaching Assistant Awards).

**Ryan Beattie** was a member of this year's winning team at the UH Venture Competition. His team developed a startup company to help learners master different languages and took home a prize package totaling approximately \$50,000.

Saige Dacuycuy and Jonathan Itokazu received ARCS Scholar Awards, a prize awarded to doctoral students in STEM fields at the University of Hawai'i at Mānoa by the Honolulu Chapter of ARCS Foundation.

#### JUNE 2024:

Seven CoE students traveled to the U.S. continent to participate in an international drone competition, the 22nd annual Student Unmanned Aerial Systems (SUAS) Competition in Maryland.



Seven students from the College of Engineering traveled to Maryland to compete in the annual Student Unmanned Aerial Systems (SUAS) Competition.

#### COLLEGE-WIDE

After a three-year hiatus due to the COVID pandemic, The Engineering Alumni Association of UH held its annual **Holmescoming** event at the University of Hawai'i at Mānoa on Oct. 6. About 900 supporters, alumni, students and faculty of the UH College of Engineering turned out in force at the Les Murakami Stadium for this "friendraiser" that provides students and alumni the perfect environment to network.

The CoE earned high marks in the 2023 **Times Higher Education World University Rankings** by Subject released in October. UH's engineering programs ranked in the top 2-3% among more than 26,000 colleges and universities worldwide in this leading ranking system driven by research and academic excellence.

Approximately 90 fifth-grade students from **Liholiho Elementary School** visited the UH campus in November to learn about a variety of STEM fields, including life sciences, chemistry, engineering and computer science.

Students, faculty and staff led the students through different hands-on activities, ranging from exploring Hawai'i's limu, exposing objects to extremely cold temperatures, seeing the reactions of chemicals and elements, computer programming and cybersecurity, exploring how a massive concrete canoe is able to float, drone technologies and Formula One style race cars.

In March, the CoE hosted a record of nearly 300 middle schoolers for a half day of friendly competition at their **Middle School Showdown**. The annual event draws teams of students across the island to compete in engineering challenges to gain hands-on experience and develop problem-solving skills.

A record turnout of more than 1,000 attendees gathered at the **College of Engineering Banquet**, held at the Hawai'i Convention Center on April 3. The event celebrated the achievements of students, faculty and alumni, while also raising a record-breaking amount of more than \$380,000 to support the college and its students.

Also a hit was the **Alumni Golf Tournament**, organized by the Engineering Alumni Association of UH and held in July at Honolulu Country Club. The event featured dozens of happy teams and prizes galore for attendees, and raised scholarship funds for engineering students.

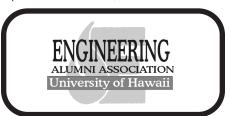
Holmes Hall and surrounding facilities were home to 18 high school interns this summer participating in the Junior Engineers Summer STEM Experience, or JESSE, **internship program**. JESSE provided students with the chance to conduct meaningful laboratory research, engage in professional development and cultural activities, participate in engineering challenges, and visit with engineering firms to explore career opportunities in a variety of settings.

UH is in the initial stages of establishing a **space engineering and instrument development center** at the UH Institute for Astronomy's facilities on the UH Hilo campus, thanks to general fund support from the Hawai'i State Legislature and Hawai'i Gov. Josh Green. The center is an interdisciplinary collaboration between the UH Institute for Astronomy (IfA), UH Hilo and the CoE, which is among the 15% of engineering schools in the country that have dedicated aerospace or related programs.

The College is recruiting for ten new full-time faculty to teach the prerequisite engineering courses at UH Hilo and serve as the core engineering team for the new center. Five of the new faculty will be located at IfA's Hilo facility and the rest at the COE in Mānoa. UH Hilo students can transfer those credits to UH Mānoa where they can go on and complete their engineering degrees. The Space Sciences Initiative is expected to attract millions of dollars in funding, expand Hawai'i's technology sector

and create more high-paying jobs on Hawai'i Island and across the state.

Lastly, in fiscal news, the College brought in a record **\$2.5 million** in fundraising during the 2023-2024 fiscal year, thanks to the generosity of our donors and partners. Also notable during this period was the College's **strong performance in research funding**, hitting \$12 million in awards and \$10 million in expenditures. These figures have grown significantly since 2019 when both awards and expenditures fell below \$4 million.



Po Box 12204 Honolulu, HI 96828 www.uhalumni.org/eaauh FAALIH

Stud.Dir.

Board

President

Treasurer

Secretary Past Pres

Directors

Vice President



#### 2024-2025 Officers

| 2024-2025 011                      | ICEIS                       |  |
|------------------------------------|-----------------------------|--|
| President:                         | Brandon Uejo                |  |
|                                    | president@hwea.org          |  |
| Vice-President:                    | Jessica Agsalda             |  |
|                                    | vice-president@hwea.org     |  |
| Secretary:                         | Kayson Smith-Bejgrowicz     |  |
|                                    | secretary@hwea.org          |  |
| Treasurer:                         | Amanda Waki                 |  |
|                                    | treasurer@hwea.org          |  |
| Past President:                    | ÷                           |  |
|                                    | past-president@hwea.org     |  |
| PWO Representative: Virgil Viernes |                             |  |
|                                    | pwo-representative@hwea.org |  |
| PWO Representative: Jeff Kafka     |                             |  |
|                                    | pwo-representative@hwea.org |  |
| National Delegat                   | ,                           |  |
|                                    | national-director@hwea.org  |  |
|                                    |                             |  |



#### Hawaii Section Officers 2024-2025

| President  | Joshua McDonough, PE     |
|------------|--------------------------|
| Pres-Elect | Charles Chaloeicheep, PE |
| Vice Pres  | Dan Mestas               |
| Treasurer  | Kelly Zheng              |
| Secretary  | John Fuller              |
| Treasurer  | Kelly Zheng              |

#### **Board of Governors**

Justin Choriki, Marites Calad, Samantha Nakamura, Tyson Toyama, Holly Morikami, Morgan Lorenzo

Join us virtually or in person for an ASHRAE Distinguished Lecturer Program presentation on High-Performance Building Design - What the Future Holds for the Direction of our Industry.

Thursday, September 12, 2024; 12:00pm -1:30pm at Hawaii Energy's Conference Room (45 N King Street, 5th Floor)

Registration is free! Please register at: https://ashraehawaiichapter.info/meetinginfo. php

During the past few decades we have seen the growth and maturation of the green or highperformance building design concept. The U.S. Green Building Council's LEED program was one of the main pioneers in this and ASHRAE's Standard 189.1 helped evolve this concept into mandatory building codes. This session provides an overview of how building systems have evolved to meet the demands for green building design and where we are headed in the future in this arena. Also covered are topics such as the evolution of building codes to include green or sustainability features, how a building designer can include these concepts in their designs, the impact of new technologies and trends such as a smart grid, decarbonization, AI and BIM on the design, and discussion on how this will impact the industry.



PO. Box 1901, Honolulu, HI 96805-1901 An association for Hawaii's Engineers and Architects

## WEB address: www.eahawaii.org

| EAH 2024-2025 Officers |                  |                |
|------------------------|------------------|----------------|
| President              | Barbara Rogers   | (808) 781-8537 |
| 1st VP                 | Open             |                |
| Past Pres.             | Canaan Shon      | (808) 845-3900 |
| Treasurer              | Aaron Erickson*  | (808) 497-0119 |
| Secretary              | Sam Gillie*      | (808) 397-3607 |
| Director               | Martin McMorrow* | (808) 247-1794 |
| Director               | Philip Blackman* | (808) 282-7948 |
| Director               | Andrew Stanton   |                |
| *Deat Draaidant        |                  |                |

\*Past President

#### FRIDAY SEP 6, 2024

#### Speaker: Dr. Clifford W Morden, Professor of Botany - School of Life Sciences

#### Topic: My Botany at UH Manoa

Dr. Morden is a Professor and Gerrit Parmile Wilder Chair in Botany in the School of Life Science at the University of Hawaii at Manoa. MAHALO TO OUR PARTNERS & SPONSORS











CORPORATION

Dr. Morden last visited eaH in 2005 when he became the director of the Lyon Arboretum. At that time the Arboretum had been closed in 2004 for problems with use of Conservation District Lands, but it reopened in 2005. Dr. Morden has been at UH Manoa since 1992. His research focuses on conservation of endangered species and the evolution and geographic dispersal of native Hawaiian species among the islands. "The plants are the real story behind the work being done here," he added, "It is our goal to help show our communities how spectacular our native and garden plants are, how important they are to our livelihood, and how critical their conservation is to sustain our natural resources." During his tenure he published dozens of research papers and directed others in their research. Dr. Morden is retiring from UH and will be returning to the mainland and has agreed to give eaH an update on his work.

#### FRIDAY SEP 20 TO BE ANNOUNCED

eaH is again an Industry Partner in this year's **PBX24**, CSI Honolulu's annual trade show for Hawai'i's construction and design industries being held in the Hawai'i Convention Center on Wednesday, October 2. Visit us at our booth. Visit the PBX Web for more information https:// pbxhawaii.com/

eaH's September Olelo feature video is the

ASHRAE Hawaii Chapter ASHRAE Hawaii Lunch Meeting Thursday, September 12, 2024

#### High Performance Building Design – What the Future holds for the Direction of our Industry



Thomas M. Lawrence, Ph.D.

Professor of Practice

College of Engineering

The University of Georgia

Dr. Lawrence is the Mechanical Engineering program lead with the University of Georgia, and has nearly 40 years of professional experience. He is the past chair of ASHRAE Technical Committee 2.8 and is a member of the committee that wrote and maintains ASHRAE Standard 189.1 for High Performance Green Buildings.

#### ASHRAE DISTINGUISHED LECTURER

Membership Promotion Day

#### GBCI Approved | 1 CE Hour | 920017335 AIA Approved | 1LU/HSW | Lawrence03

This session provides an overview of how building systems have evolved to meet the demands for green building design and where we are headed in the future in this arena. Also covered are topics such as the evolution of building codes to include green or sustainability features, how a building designer can include these concepts in their designs, the impact of new technologies and trends such as a smart grid, decarbonization, AI and BIM on the design, and discussion on how this will impact the industry.

Please register online: https://ashraehawaiichapter.info/meetinginfo.php

In-Person (Includes Lunch) - Free

Virtual - Free

Hawaii Energy | Conference Room 45 N King St 5th Floor, Honolulu, HI 96817 12:00pm-1:30pm Lunch Meeting

September 14, 2012 eaH meeting with the late **Alfred Yee** (1925-2017) structural engineer, who talked about the structural design of his tallest building, "The Sail", a 87 story pre-stressed concrete building in Singapore completed in 2008. He also talked about how Singapore solved their lack of affordable housing.



P.O. Box 31218, Honolulu, HI 96817 Web page: www.samehonolulu.org

#### SAME Honolulu Post Officers

1st VP, Programs 2nd VP, Sustaining Members 3rd VP, Membership Secretary Treasurer

President

CAPT Andrew Joca, U.S. Coast Guard (USCG) Base, Honolulu Commanding Officer Leighton Wong, PE

Will Boudra, USN (Ret) Brian Weinstein Jeff Clark Andre Lee



#### STRUCTURAL ENGINEERS ASSOCIATION OF HAWAII

PO BOX 3348, HONOLULU, HI 96801 Web Page URL http://www.seaoh.org

# 2024 BOARD OF DIRECTORS

| OFFICERS AND DIRECTORS |                                  |  |
|------------------------|----------------------------------|--|
| President              | Timothy Goshi                    |  |
|                        | tgoshi@kaihawaii.com             |  |
| Vice President         | Grant Okunaga                    |  |
|                        | grant@mkellc.com                 |  |
| Secretary              | Phil Boultinghouse               |  |
|                        | philip.boultinghouse@coffman.com |  |
| Treasurer              | Renee Ishisaka                   |  |
|                        | rishisaka@ssfm.com               |  |
| Director (Yr 2)        | Mark Geoghegan                   |  |
|                        | markfgeoghegan@gmail.com         |  |
| Director (Yr 2)        | Colin Kodama                     |  |
|                        | colin.kodama@coffman.co          |  |
| Director (Yr 1)        | Tim Waite                        |  |
|                        | twaite@strongtie.com             |  |
| Director (Yr 1)        | Tristan Greene                   |  |
|                        | tgreene@baseengr.com             |  |
| PREVIOUS BOD MEETING   |                                  |  |

August 7, 2004

#### August 7, 2024

#### **UPCOMING EVENTS**

For all events see *seaoh.wildapricot.org.* Look for email flyers for registration of upcoming events.

- SEAOH Annual Convention September 26 – 28 at Aulani.
- 2024 SEAOH SCHOLARSHIP GOLF

#### TOURNAMENT

SEAOH is planning to hold the 12th annual scholarship golf tournament on November 1st at Kapolei Golf Club. Refer to the SEAOH website for an entry form.

#### 2024 SEAOH SCHOLARSHIP

SEAOH will be awarding scholarships to students entering or currently attending an accredited college or technical school as fulltime students. A request for applicants and the scholarship application form has been posted on the SEAOH website. The deadline to apply is September 20, 2024.

#### MEMBERSHIP

Ryan Lawton of Pacific PEMB has been approved as an Associate Member.

The following new membership applications were received:

- Jared Kosaki, Coffman Engineers, Inc. Student Member
- · Uriah McCall, Stantec. Associate Member
- Brensen Joel Manding, MKE Associates, Inc. Student Member
- Alex Nakasato, MKE Associates Student Member

Please contact any SEAOH Board Member by September 1, 2024 to file comments regarding the new applicants.

#### SEAOH BOARD OF DIRECTORS

SEAOH is looking to fill spots for the 2025 Board of Directors. If interested in serving on this prestigious board, please contact Mike Greer mgreer@wje.com

#### NEXT BOD MEETING

Wednesday September 4, 2024. For information, contact SEAOH President Tim Goshi at *tgoshi@kaihawaii.com*.



#### HAWAII SECTION 2024-2025 OFFICERS www.aacehawaii.com

| President    | Calvin Gidlof, CCP         |
|--------------|----------------------------|
| Vice Pres.   | Scott Arend, PSP           |
| Secretary    | Rollin Wakely, CCP         |
| Treasurer    | Yong Shi, CCP              |
| Social Media | David Ladines              |
| Past Pres.   | Justin Kirschner, CEP, PSP |

#### AACE HAWAII SECTION ANNOUNCES NEW BOARD OF DIRECTORS FOLLOWING RECENT ELECTIONS

The Association for the Advancement of Cost Engineering (AACE) Hawaii Section is pleased to announce the results of its recent Board of Directors election. The newly elected members bring a wealth of experience and dedication to their roles, positioning the organization for continued growth and success in the upcoming term.

President – Galvin Gidlof Vice President – Scott Arend Treasurer – Yong Shi Social Media – David Ladines Secretary – Rollin Wakely Past President – Justin Kirschner

The new board members will officially begin their terms on July 2024, and they are excited to continue the legacy of excellence that AACE Hawaii Section is known for. Their collective expertise and fresh perspectives are expected to lead AACE to new heights, providing unparalleled value to its members and the industry.

AACE Hawaii Section extends its gratitude to the outgoing board members for their service and dedication. Their contributions have been invaluable in steering the organization towards success.

As a member of the Board of the Council of Engineering and Scientific Specialty Boards (CESB), AACE International offers a range of certification levels from technician to professional to expertise level including CCT, CCP, CEP, EVP and PSP Certification Programs.

The local section, AACE Hawaii, was originally established in 1973. It achieved both the Platinum and Gold Award for nine consecutive years 2014-2022. Our local area continues to achieve CCP, CEP, CST and PSP certifications. For more information, please visit *http://web.aacei.org/certification* and our local website *www.aacehawaii.com*.



#### 2024-2025 Officers:

President:

Vice Pres.: Miche Sec/Treas: Joel T

cers: Keoni Wasano keoni@goldwings-supply.com Michelle Agustin Lindsey Joel Thomas August: Mahalo to those who joined us at our section meeting on August 28, 2024, where Mark Garrity, Executive Director for the Oahu Metropolitan Planning Organization, spoke on the Oahu Regional Transportation Plan 2050 and other transportation initiatives.

Please visit our website for upcoming events and future registrations. *www.ite-hawaii.org.* 

#### UPCOMING EVENTS:

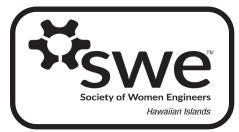
- September 25, 2024: ITE Section Meeting (virtual). We will have Daniel Alexander and Germain Salim-Hagihara from CCH talking about the Oahu Vision Zero Plan.
- October 24, 2024: ITE Hawaii Section Annual Meeting. Due to renovations at the Outrigger Canoe Club, this year's annual meeting will be held in the Goldwings conference room at the International Trade Resource Center. The theme is ITE Game Night with a Family Feud style competition as well as lawn games. Flyer and email with detailed information to be distributed soon to ITE members and friends. We hope to see you all there!

If you would like to be informed on future ITE events or are interested in becoming a member, email Joel Thomas at *joel@qrse.com*.



http://www.hawaiispe.org/

| HSPE Officers for 2024-2025 |                                 |
|-----------------------------|---------------------------------|
| President:                  | Irina Constantinescu            |
|                             | IConstantinescu@BrwnCald.com    |
| Pres. Elect:                | Mike Silva                      |
|                             | mike@femaui.com                 |
| Vice Pres:                  | Sara Doi-Tanaka                 |
|                             | sdoi@bowersandkubota.com        |
| Secretary:                  | Ikaika Rodenhurst               |
|                             | irodenhurst@bowersandkubota.com |
| Treasurer:                  | Pac Chung                       |
|                             | pchung@bowersandkubota.com      |
| HOD '24-'25:                | Mike Lum                        |
|                             | mlum@bowersandkubota.com        |
|                             |                                 |



HOME PAGE: http://hi.swe.org EMAIL: hawaii@swe.org Facebook: www.facebook.com/swe.hawaiianislands

#### 2023-2024 SWE Hawaiian Islands (SWE-HI) Section Officers President: Lynette Shiroma

Vice President: Vacant Treasurer: Mary Despe Secretary: Erin Yamaguchi The mission of the Society of Women

The mission of the Society of Women Engineers is to empower women to achieve full potential in careers as engineers and leaders, expand the image of the engineering and technology as a positive force in improving the quality of life, and demonstrate the value of diversity and inclusion.

# **Professional Directory**

