

HAWAII COUNCIL OF ENGINEERING SOCIETIES Recognizes 4 Outstanding Engineers for 2021

The Hawaii Council of Engineering Societies (HCES) annually recognizes four outstanding engineers at their Engineers Week Banquet. They were selected for their outstanding achievements and contributions to the profession and Hawaii. Due to restrictions created by the pandemic, they will be recognized at a virtual ceremony on Friday, February 26, at noon. The following individuals will be recognized.

Mr. Steve Baldrige, P.E., has been selected by the Hawaii Society of Professional Engineers as the 2021 Engineer of the Year. He is the founder and President of Baldrige & Associates, Structural Engineers, Inc., where he leads BASE's pursuit of innovation and practical approaches to making buildings stronger, safer, and more cost-efficient. Under his leadership BASE has expanded to Guam, Chicago, Florida, and India with signature projects across all offices.



Steve Baldrige

Mr. Baldrige received his BSCE from the University of Wisconsin - Madison and MSCE from the University of Texas - Austin, and started his engineering career working in Chicago, Houston, and Dallas. Two downturns in the construction market brought him to Honolulu that led him to embark on a venture to start his own structural engineering firm in 1995.

His firm has emerged as a leading structural engineering consulting firm addressing protective design. In addition to protective design, Steve and his firm are one of the nation's foremost experts in engineering for high-risk environments with special expertise in designing structures that are resilient against high seismic activity, hurricane/tornado winds, or tsunamis. Steve has served on and chaired technical councils advancing the design state of art.

Steve has shared his expertise in natural disaster mitigation through

volunteering in areas hit by earthquakes and tsunamis. The majority of these trips were pro-bono efforts for technical non-profits that often required staying in tents or hotel rooms with no power.

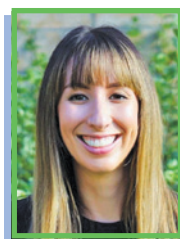
Steve also volunteers to work with Honolulu's youth with an emphasis on encouraging STEM. He formed the Hawaii chapter of the ACE Mentor Program in 2001. In 2007 he travelled with a team from Moanalua High School to Washington, D.C., where they won the inaugural CIRI/ACE national design competition.

Ms. Kapiolani Street, P.E., was selected by the Hawaii Society of Professional Engineers as this year's Young Engineer of the Year.

Ms. Street earned a BS in Civil Engineering and a BA in Anthropology from the University of Hawaii at Manoa. She obtained her MBA from the University of Hawaii at Manoa, Shidler College of Business. She has over 7 years of experience on civil and sanitary engineering projects. She currently works as a Project Engineer at the Limtiaco Consulting Group in Honolulu. Her projects include stormwater erosion control design, wastewater system design, site development and utility design.

Ms. Street became a licensed professional engineer in the State of Hawaii in 2017. She is active in many professional and technical societies.

Mr. Willy Chang was selected as the HCES Student Engineer of the



Kapiolani Street

Year by a UHM College of Engineering faculty committee.

With a cumulative GPA of 3.99 and a major GPA of 4.00, Willy is expected to graduate with a BS in Computer Engineering and a minor in Business Administration this Spring 2021. He will be continuing into the UH College of Engineering Electrical Engineering Master's program as a BAM (Bachelors and Masters) student.

Entering the UHM as a Regent's Scholar, Willy wished to continue his academic career not only as an individual seeking awards and a Bachelor's degree, but one who satisfies his thirst for knowledge and practical applications. Even though enrolled in the College of Engineering as a Computer Engineer, he became involved in the medical arena. He has participated in project activities in both curricula. Willy has been a math and science tutor and is currently working as a teaching assistant.

The Hawaii Council of Engineering Societies' Lifetime Achievement Award provides annual recognition to the lifetime achievements of an outstanding retired engineer who has contributed significantly to the development of engineering in the State of Hawaii. **Mr. David Waller**, (1948-2020), P.E., is posthumously the 2021 recipient. Dave was selected for this honor for his 46 years engineering career that was always directed to developing a resource essential for our modern



Willy Chang

society, energy.

Dave earned his Chemical Engineering degree from Rose-Hulman Institute of Technology in Terre Haute, Indiana. He started in the petroleum industry as a chemical engineer testing oil wells in Montana and Canada, and then as a refinery engineer at PRI in Hawaii before going to Hawaiian Electric. His work at Hawaiian Electric was redirected toward developing the best and most efficient ways to generate and use electricity. Dave was acutely aware of the need for Hawaii to develop renewable energy sources, especially in geothermal energy. After his retirement from Hawaiian Electric, he re-tooled his skills by adding geoscience to his resume by joining the Master of Geoscience for Professionals Degree Program at the University of Hawaii.

Dave's lifetime accomplishments first in discovery of new oil and natural gas energy sources, his work in electric utility energy conservation and renewable energy; and lastly in finding firm renewable geothermal energy sources in Hawaii will continue to benefit future generations and has made Hawaii a better place for all to live.

The Hawaii Council of Engineering Societies is proud to recognize these four outstanding Hawaii engineers for their accomplishments and contributions to Hawaii.



David Waller

Celebrating 56 years

HCES

Hawaii Council of Engineering Societies

DISCOVER 
ENGINEERS WEEK
February 22-26, 2021

HCES
SINCE 1965

Celebrating **25** years of innovative structural solutions



Congratulations **Steve Baldrige** 2021 Engineer of the Year and to all 2021 Award Recipients

www.baseengr.com



Congratulations **Kapiolani M. Street**

Young Engineer of the Year

We are proud of you.

Cheers to all 2021 awardees.



THE LIMTIACO CONSULTING GROUP

Congratulations to the 2021 honorees!

We are proud to represent the local engineering community in helping to solve Hawaii's most challenging problems.



IMAGINING TOMORROW



Congratulations to the "Outstanding Engineers" award winners and thank you for shaping the future with your passion for engineering, design, and construction.



745 Fort Street #400 Honolulu, HI | 96813
www.coffman.com

ControlPoint Surveying, Inc.

Oahu:
615 Piikoi St., Suite 700 Honolulu, Hawaii 96814
Ph: (808) 591-2022
Fax: (808) 591-8333
Email: surveying@cpshawaii.net

Mau:
1129 Lower Main Street, Suite 104 Wailuku, Hawaii 96793
Ph: (808) 242-9641

Hilo:
100 Pauahi Street, Suite 208 Hilo, Hawaii 96720
Ph: (808) 464-4585



INSYNERGY ENGINEERING
www.insynergyeng.com

Congratulations to all of the 2021 Award Recipients

FUKUNAGA & ASSOCIATES, INC.
CONSULTING ENGINEERS

CELEBRATING 50 YEARS OF SERVICE

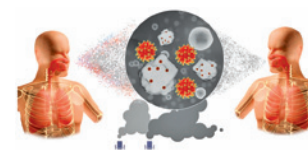
1357 Kapiolani Boulevard / Suite 1530 / Honolulu, HI 96814
Phone 808-944-1821 / Fax 808-946-9339
Website: fukunagaengineers.com

The College of Engineering's year in review

While 2020 was a year like none other, students and faculty at the College of Engineering at UH Mānoa continued to learn and innovate by employing an engineer's mindset to the challenges confronting our community. Here's a recap of what we've been up to this past year.

Online and hybrid instruction
From March through the start of the fall semester, classes across UH were offered strictly online. And while the majority of our classes are still delivered virtually, the University has begun to allow certain laboratory and studio classes to meet in-person (with strict social distancing and safety protocols), including some of our Engineering lab classes and senior design courses.

Traditional events gone virtual
Many of the College's long-held events were held via various online platforms last year for the first time ever. The list included: Open House, Convocation, Career Day, the Annual Banquet fundraiser, our Faculty & Staff Awards Ceremony, and others. While a virtual event can never fully replicate an in-person experience, we discovered there were some unique benefits to holding our events online, including the ability to invite participants from out-of-state and the ease of data tracking and follow-up that comes with an online format.



College-wide highlights
• Research Awards and Expenditures – The 2019-2020 academic year was an impressive, and record-breaking, year for research, with over \$17 million in research awards and \$9.9 million in expenditures.
• In October, the College hosted the ALOHAnet IEEE Milestone Dedication Ceremony, recognizing the world's first wireless network developed at the College. Dean Morioka emceed the event, which featured founders Norm Abramson and Frank Kuo, Governor David Ige, UH President David Lassner, and the "Father of the Internet," Google's Vint Cerf.
• Last Spring, the College partnered with organizations including DataHouse, the State Department of Agriculture, Hawai'i Dental Service and Pearl Harbor Naval Shipyard & IMF to implement widely popular industry-integrated courses that allow students to earn college credit while tackling real-world problems

alongside industry professionals.
• Much progress has been made with our O'ahu Engineering Sector Partnership, a group designed to foster cross-sector dialogue and collaboration between industry and education to better understand Hawai'i's current engineering talent pipeline and develop strategies to improve student preparedness for careers in engineering. Working alongside the Chamber of Commerce Hawai'i and the Department of Education, our group selected three high school complexes - Waipahu, Campbell, and Castle - to run a pilot program to initiate our "Cradle to Career" pathway concept.

Faculty notes
February 2020:
• A study by Guohui Zhang and David Ma focused on extreme-weather car-crash injuries was awarded the 2020 Best Young Researcher Paper by the Transportation Research Board Transportation Safety Management Committee.

April 2020:
• Roger Babcock was awarded a Board of Regents Medal for Excellence in Teaching from UH Mānoa, out of nearly 300 campus-wide nominations.
• Tao Yan received an NSF grant for more than \$150,000 to conduct local wastewater testing with the goal of determining the community disease burden of COVID-19.
• Mechanical Engineering Associate Professors A Zachary Trimble and Scott Miller helped develop an innovative technique to treat up to four COVID-19 patients with a single ventilator, which was tested with partners at the Kapi'olani Medical Center for Women and Children.



May 2020:
• Sayed Bateni was awarded a Fulbright scholarship to conduct water research in Qatar, aiming to predict heat wave duration and intensity by merging remotely sensed land surface temperature and meteorological data within machine learning approaches.
• Three faculty members received Hi Chang Chai Faculty Teaching Awards, one from each department as voted on by the students: Ian Robertson (CEE), Aaron Ohta (EE), and Scott Miller (ME).
• Associate Dean David Ma's project that generates electricity from water drops was published in Nano Energy — one of the top journals in energy, electrical engineering and renewable energy & sustainability.

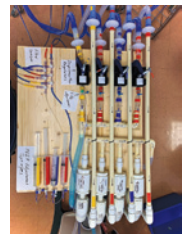
June 2020:
• With David Ma at the helm, the College partnered with the Hawai'i Department of Transportation, Federal Highway Administration, Econolite, and Goldwings Supply on a \$6 million pilot project expected to greatly improve traffic flow through a critical Honolulu corridor.



• The College received \$1.2 million of a total \$1.8 million award to UH from the Office of Naval Research to evaluate and study issues related to the Red Hill Fuel Tanks in Hawai'i.

July 2020:
• Professors Tyler Ray and Magdy Iskander were featured in the June/July issue of Honolulu Magazine for their work in the wearable technology space.

August 2020:
• UH Mānoa mechanical engineering and pediatrics Professor Yi Zuo invented a groundbreaking 3D imaging method, Constrained Drop Surfaceometry (CDS) that uses the surface of a single droplet to simulate the fluid lining layer of the lung, a discovery that has the potential to contribute to improved medical care for patients experiencing difficulty breathing.



September 2020:
• Assistant Professor Zhuoyuan Song received an NSF grant of nearly \$400,000 in hopes of significantly enhancing the study of the world's oceans by developing underwater robots that can communicate and collaborate to collect data.
• Associate Professor Dilmurat Azimov received a grant from NASA to develop a strategic plan for an aerospace academy that will foster aspiring engineers—the next generation of diverse, qualified candidates to contribute to the groundbreaking work of NASA and strengthen Hawai'i's skilled workforce in the aerospace market.
• The University of Hawai'i at Mānoa College of Engineering was recognized for its commitment to preparing the state for a future of self-driving cars, and Hawai'i Gov. David Ige commended Dean Brennan Morioka, Interim Associate Dean David Ma and the College at a virtual bill signing event.

November 2020:
• A research project under assistant professor Joseph Brown to develop a game-changing new technology that could impact aerospace and electronics manufacturers received a big boost thanks to a three-year, \$486,000 research grant from the Air Force Office of Scientific Research (AFOSR).
• Professor Albert Kim published a book, Ocean Thermal Energy Conversion (OTEC): Past, Present, and Progress, which explores the past achievements, present developments, and future progress of ocean thermal energy, examining how the world can advance the utilization of ocean resources in a century that has been characterized as an era of natural resource depletion.

December 2020:
• Assistant Professor William Uspal's efforts to enhance the performance and efficiency of petroleum-related industrial processes received a major boost from the American Chemical Society with a \$110,000 Doctoral New Investigator grant. This grant will help support the work of two PhD students.

Student notes
February 2020:
• Wahine volleyball player and engineering student Rika Okino was named the 2020 Hawaii Council of Engineering Societies Student Engineer of the Year.

April 2020
• Nicholas Yama, a senior, and Kevin Kam, a recent graduate, were each awarded a \$135,000 National Science Foundation Graduate Research Fellowship. They were two out of only 59 electrical engineering students selected nationwide.
• Environmental engineering PhD candidate Sabrina Diemert was named this year's recipient of the Frances Davis Award for Excellence in Undergraduate Teaching for a Graduate Assistant.

May 2020:
• Three seniors received Outstanding Graduating Senior recognitions: Rika Okino (CEE), Nicholas Yama (EE), and Kayli Chun (ME). At the graduate level, Yeon Sang You received the Outstanding Teaching Assistant award and Kareem Elassy received the Outstanding PhD Student award. The ME Department's first-ever Bruce Liebert award went to Kai Outlaw-Spruell.
• To celebrate spring graduates who would not experience an in-person graduation, masters student Brianne Tengan built a virtual composite of the UH campus in the game Minecraft and planned and executed a commencement ceremony in the virtual world, streamed live.

June 2020:
• ME undergrad John Sadorra was awarded the 2020-2021 Chancellor Virginia S. Hinshaw Scholarship in Sustainability.

July 2020:
• Arif Rahman, a 2018 University of Hawai'i at Mānoa electrical engineering PhD graduate, received a two-year, \$120,000 postdoctoral fellowship to develop a space medical oxygen delivery system.
• A group of four UH students, including engineering majors Jonathan Wallen and Maddysen Jesketook, received the top prize in the U.S. Department of Energy 2020 Marine Energy Collegiate Competition for their underwater vehicle charging station.



August 2020:
• Under the guidance of Professor Albert Kim, CEE students Mia Fong, Brenton Sasaoka and Seth Colburn designed a predictive model that forecasts COVID-19 cases and deaths.

September 2020:
• Two CoE doctoral candidates, Douglas Ellman and Brenden M. Minei, were awarded \$5,000 Scholar Awards from the ARCS Foundation-Honolulu Chapter.

October 2020:
• A UH team, led by Department of Electrical Engineering graduate student Frendy Lio Can, placed third out of 249 teams in EduHacks 2020, an international education-based hackathon.
• The Rainbow Warriors Racing (RWR) team received a major boost from Toyota Hawaii, a subsidiary of Servco Pacific Inc., with a 5-year, \$60,000 pledge to help design, analyze, manufacture and test a fully-electric race car with the hopes of competing in the Formula Society of Automotive Engineers (FSAE) Electric Competition in 2021 and beyond.

December 2020:
• Maddysen Jeske was selected as the recipient of the University of Hawai'i

at Mānoa Department of Mechanical Engineering Prof. Bruce Liebert Award. During her undergraduate studies, Jeske led an underwater docking station (UDS) project for the Robot Autonomy and Navigation laboratory.
• University of Hawai'i senior offensive lineman and ME student Taaga Tuulima was among a group of 67 Football Bowl Subdivision student-athletes nominated for the 2020 Burlsworth Trophy, given to the nation's most outstanding player who began his career as a walk-on.



Kahauiki Village's renewable energy micro-grid provides affordable power to homeless families

INSYNERGY ENGINEERING "To service our clients as if their projects are our own investments."

THE LIMTIACO CONSULTING GROUP
CIVIL ENGINEERING AND ENVIRONMENTAL CONSULTANTS

tlcghawaii.com

Ronald N.S. Ho & Associates, Inc.
Engineering | Construction Management | Energy Solutions
2153 North King Street, Suite 201
Honolulu, HI 96819
Tel: (808) 941-0577 | Web: rnsha.com

AECOM
DELIVERING A BETTER WORLD
ARCHITECTURE & DESIGN
CONSTRUCTION MANAGEMENT
PLANNING
ENGINEERING
ENVIRONMENTAL SERVICES
AECOM congratulates this year's award recipients!

ParEn, Inc.
Suite 1500, Pacific Park Plaza
711 Kapiolani Boulevard
Honolulu, Hawaii 96813
TELEPHONE: 808-593-1676
FAX: 808-593-1607
EMAIL: paren@pareninc.com
WEB: www.pareninc.com
dba park engineering
Engineers, Surveyors, Planners

ControlPoint Surveying, Inc.
Oahu:
615 Piikoi St., Suite 700
Honolulu, Hawaii 96814
Ph: (808) 591-2022
Ph: (808) 591-8333
Email: surveying@cpshawaii.net
Maui:
1129 Lower Main Street, Suite 104
Wailuku, Hawaii 96793
Ph: (808) 242-9641
Hilo:
100 Pauahi Street, Suite 208
Hilo, Hawaii 96720
Ph: (808) 464-4585

BENNETT ENGINEERS INC.
Consulting Electrical Engineers
765 Amana St.
#201
Honolulu, HI 96814
Ph. 955-8565
E-mail: bei@hawaiiintel.biz
www.bennettengineers.com

ESH
ENGINEERS SURVEYORS HAWAII, INC.
1320 N SCHOOL STREET, SUITE 1
HONOLULU, HAWAII 96817
(808) 591-8116 (Honolulu)
(808) 593-8101 (Fax)
(808) 885-4590 (Kamuela)
Website: www.esh-inc.com

ENGINEERING CONCEPTS, INC.
Engineering Consultants
Civil/Environmental/
Sanitary Engineers
1150 S. King Street,
Suite 700
Honolulu, Hawaii 96814
Tel: (808) 591-8820
Fax: (808) 591-9010
E-Mail: eci@ecihawaii.com

R. M. TOWILL CORPORATION
Serving Hawaii for 90 years!
Civil Engineering
Wastewater Engineering
Surveying & Photogrammetry
Planning & Permitting
Construction Management
2024 North King Street, Suite 200
Honolulu, Hawaii 96819
(808) 842-1133
75-5574 Malia Street, Suite 11
Kailua-Kona, Hawaii 96740
(808) 329-4494
www.rmtowill.com

BOWERS + KUBOTA
• Construction Management
• Architectural/Engineering Design
• Project Management
• Planning
94-408 Akoki Street
Suite 201-A
Waipahu, Hawaii 96797
Phone: 808-836-7787
www.bowersandkubota.com

DR
Ideas transform communities
Celebrating Engineers Week
Honolulu 808.697.6200
Wailuku 808.359.2518
hdrinc.com

CUMMING
Building Value Through Expertise
Program & Project Management
Cost Management & Estimating
Planning & Scheduling
Dispute Resolution & Avoidance
841 Bishop Street
Suite 725
Honolulu, HI 96813
808.947.4525
www.ccorpusa.com

KAI HAWAII
STRUCTURAL & FORENSIC ENGINEERS
AN EMPLOYEE-OWNED COMPANY

SAM O. HIROTA, INC.
CIVIL ENGINEERING
LAND SURVEYING
AERIAL IMAGING
3D COLOR LASER SCANNING
SCAN TO BIM
www.samhirota.com
808-537-9971