



COLLEGE OF ENGINEERING  
UNIVERSITY of HAWAII at MĀNOA

# 26TH ANNUAL BANQUET

**4:30 PM - Student project expo & cocktails**

**6:45 PM - Welcome remarks**

Dean Brennon Morioka

Governor Josh Green, M.D.

UH President Wendy Hensel

**7:00 PM - Dinner service begins**

**7:35 PM - Formal program**

**Awards ceremony**

Outstanding Service Award – DAYNA NEMOTO-SHIMA & BRANDON SHIMA

Distinguished Alumni Award – GREG HIYAKUMOTO

Dean's Award of Excellence – BHARATH KADABA

**Featured Student Project**

UNEXPLODED ORDNANCE (UXO) PROJECT

**Live Auction**

**Raffle Giveaway**

**8:30 PM - Pau**

# TABLE MAP

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	LEGENDS HEROES CHAMPS			STAGE															
A	UH	Individuals 2	Hirata	BowCM	AC Kobayashi	KSF	Royal	QRSE	KAI	Southwest	AECOM	Castle & Cooke	HDR1	Stantec	Individuals 3	UH			
B	UH	UH	UH	Gentry	Bowers + Kubota	CPE	Nemoto Shima 2	Nemoto Shima 1	HEAD TABLE			RM Towill 1	Wilson Okamoto	ParEn1	HDR2	Kiewit	UH	UH	UH
C	UH	UH	UH	Geolabs	HI Dredging 2	HI Dredging 1	Maryl Group	Okahara				RM Towill 2	Individuals 1	ParEn2	Engineering Concepts	Wes Segawa Assoc.	UH	UH	UH
D	UH	UH	UH	Swinerton	Limtiaco	EAAUH	Queen's	Stanford Carr				RonHo1	Yogi Kwong	Element Enviro.	Hensel Phelps	CPB	UH	UH	UH
E	UH	UH	PBR and Lowney	HC&D	Clay & Glenn	Koga	Hawaiian Electric	Wasa	RonHo2	Akinaka	Frank Coluccio	Burns n' Mac	Moss	HI Eng Services	UH	UH			
F	UH	UH	HI Gas	Admor HVAC	Jacobs	Jayar	Oceanit	WSP	Gray Hong Nojima	Coffman	MEI	Kokua Geotech	Austin Tsutsumi	UH	UH	UH			

ORGANIZATION	TABLE NO.
AC Kobayashi	5
Admor HVAC Products, Inc.	93
AECOM	11
Akinaka & Associates, Ltd.	74
Austin, Tsutsumi & Associates, Inc.	84
Bow Construction Management	4
Bowers + Kubota Consulting	28
Burns & McDonnell	76
Castle & Cooke	12
Clay & Glenn	69
Coffman Engineers, Inc.	87
Central Pacific Bank	52
Community Planning & Engineering, Inc.	27
EAAUH	59
Element Environmental	54
Engineering Concepts, Inc.	44
Frank Coluccio Construction Company	75
Gentry Homes, Ltd.	29
Geolabs, Inc.	36
Gray, Hong, Nojima & Associates, Inc.	88
Hawaiian Electric	71
HC&D	68

ORGANIZATION	TABLE NO.
HDR 1	13
HDR 2	21
Hensel Phelps Construction Co.	53
Hawaiian Dredging Construction Company, Inc. 2	37
Hawai'i Engineering Services	78
Hawai'i Gas	94
Hawaiian Dredging Construction Company, Inc. 1	38
Hirata & Associates, Inc.	3
Individuals 1	42
Individuals 2	2
Individuals 3	15
Jacobs	92
Jayar Construction Co., Inc.	91
KAI Hawai'i	9
Kiewit	20
Koga Engineering & Construction, Inc.	70
Kokua Geotech	85
KSF, Inc.	6
Limtiaco Consulting Group, The	60
Maryl Group	39
Mechanical Enterprises, Inc.	86
Moss Construction	77

ORGANIZATION	TABLE NO.
Nemoto Shima 1	25
Nemoto Shima 2	26
Oceanit	90
Okahara & Associates	40
ParEn1	22
ParEn2	43
PBR Hawai'i & Associates and Lowney Architects	67
QRSE, LLC	8
Queen's Medical Center, The	58
R.M. Towill Corporation 1	24
R.M. Towill Corporation 2	41
Ronald N.S. Ho & Associates 1	56
Ronald N.S. Ho & Associates 2	73
Royal Contracting	7
Southwest Airlines	10
Stanford Carr Development, LLC	57
Stantec	14
Swinerton Builders	61
Wasa Electrical Services, Inc.	72
Wesley R. Segawa & Associates, Inc.	45
Wilson Okamoto Corporation	23
WSP USA Inc.	89
Yogi Kwong Engineers, Inc.	55

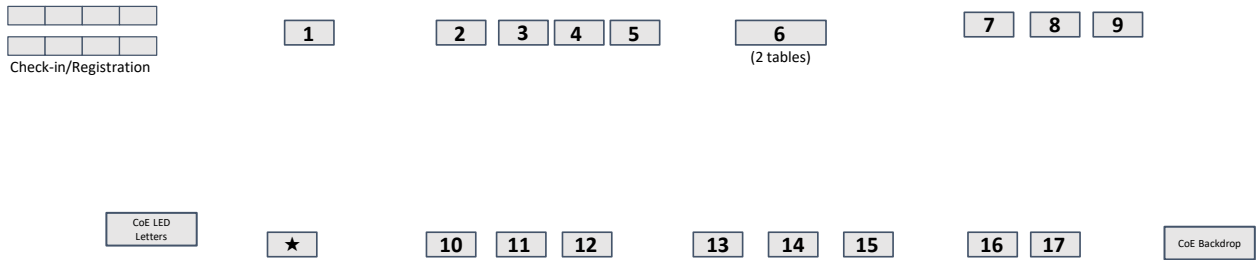
# STUDENT PROJECTS

PROJECT NAME	TABLE	DESCRIPTION
ALL-IN FREEK-s	29	Team ALL-IN FREE-Ks aims to design and test a bioinspired robotic system modeled after the snapping shrimp's claw mechanism utilizing soft robotics. The system will be used to investigate and compare the efficiency of different methods of cavitation generation. The results of this work aim to contribute insights applicable to real-world cavitation technologies and related engineering applications.
ASCE - General	26	Student organization for civil engineering with teams for 12 technical projects, along with hosting various community service, social, outreach, and professional events for members
ASCE - Steel Bridge	27	Design, fabricate, and construct a 20-foot bridge made entirely out of steel where the bridge is graded on maximizing the structural integrity while also optimizing the constructability of the bridge.
ASCE- Concrete Canoe	25	Construct a canoe with a lightweight and susaintable concrete mix design. The project is graded based on the final project prototype, project proposal, presentation, and racing performance
Cleanroom Hawaii Internship Program (CHIP)	14	With funding from the CHIPS and Science act, the Cleanroom Hawaii Internship Program's goal is to train students from local community colleges with the skills and knowledge to fill the many vacant cleanroom technician positions in cleanrooms all across America.
<i>Hawaii State Science &amp; Engineering Fair Selection:</i> Characterizing Sargassum Polyphyllum for Use in Biodegradable 3D-Printing Supports	18	This project investigates the use of seaweed-derived alginate as a biodegradable alternative to conventional 3D printing support materials.
<i>Hawaii State Science &amp; Engineering Fair Selection:</i> Using AI Object Detection to Detect Wildfires Through Aerial Footage	19	Raspberry Pi powered AI detection for wildfires.
Hawaii's Aspiring Aerospace Engineering Academy: Ground Station and Satellite Project	10	Hawaii's Aspiring Aerospace Engineering Academy (HAAEA) participants are working with support from NASA to develop a rotating antenna for a ground station to receive signals from satellites as well as developing a 3U cubesat working towards autonomous navigation.
Synthesizing Trajectory for Air Traffic Control Purposes		Synthesizes UAV trajectories using a nonlinear quadrotor model and various control laws for use in air traffic control simulations.
HSFL: Neutron-2	30	Neutron-2 is a student led cubesat mission which is backed by the University Nanosatellite Program. The Neutron-2 mission is also part of the EPET curriculum which acts as the senior design project for Aerospace concentration engineering majors. The project however crosses all disciplines and design processes of a NASA level mission.
Investigating 3U CubeSat Radar Feasibility for Detecting Sub-10 cm Orbital Debris	13	This project develops a low cost radar system for a 3U CubeSat to detect objects under 10 cm. By varying size, distance, and velocity, it evaluates radar cross section and Doppler signatures to define detection limits and guide scalable payload design.
Kanaloa: FF	24	Team Kanaloa is developing a "fast fluorescence" sensor for the detection of underwater plastic debris. The system employs laser excitation to generate a fluorescent signature that allow for imaging. This sensor is being deployed on Kanaloa's MRUH double-hull unmanned surface vessel with semi-autonomous capabilities.
Manoa Astronomical Technologies (MAT)	20	Manoa Astronomical Technologies is currently in partnership with the Institute for Astronomy (IfA), developing a science case for the integration of HIRES onto UH88. HIRES is a high-resolution spectrograph currently deployed on the Keck Observatory.
Micro VIP	22	The Micro VIP team works on microsystems, including microfluidic impedance sensors and image segmentation of cells
Multifunctional Nanocomposites Employing Nanoforest Technology	15	Patented Carbon Nanotube-Based Nanoforest are used to Develop Polymer Nanocomposites with Multifunctionalities
3D Printing Technologies for Polymers and Ceramics		Liquid Deposition Molding Machine are modified to 3D Print the Patented Nanopaste to Develop Ceramic Nanocomposites with Multifunctionalities
Reconfigurable Intelligent Surfaces	16	RIS (Reconfigurable Intelligent Surfaces) aims to develop and implement radiofrequency beamforming and reflective surface technologies to boost high-frequency signal strength for high-speed wireless data transfer.

# STUDENT PROJECTS

PROJECT NAME	TABLE	DESCRIPTION
Remote Health Monitoring Using Channel State Information (CSI) from WiFi Signals	12	This project investigates the feasibility of using WiFi Channel State Information (CSI) to develop a non-contact, privacy-preserving system for monitoring physiological signals and detecting potential fall risks in older adults without requiring wearable devices or cameras.
Smart Campus Energy Lab	28	The Smart Campus Energy Lab (SCEL) is working to design and create weatherboxes to monitor environmental data which will be used to assist with the university's energy and sustainability goals.
Team 'ĀINA	17	Team 'ĀINA is a student-led robotics group competing in the Farm Robotics Challenge, with the goal of advancing agricultural innovation in Hawai'i through hands-on engineering and community partnerships.
Team Camrock	21	Team Camrock is a senior design team that will create a low-cost tube-launched modular guided rocket, with a 100% additively manufactured body that will use commercial-off-the-shelf hardware and software, to potentially track and intercept Unmanned Aerial Systems (UAS).
Team Hokulele	6	Team Hokulele is a senior design team and vertically integrated project for students to design, manufacture, launch, and recover a high-powered rocket with a target altitude of 25,000 feet in order to win the Friends of Amateur Rocketry (FAR) FAR-Unlimited Competition.
Team Kanaloa: RIP-C	23	Team Kanaloa is a senior design team that will create a semi-autonomous Unmanned Surface Vessel (USV) for high surf zones. With self-righting capabilities, the USV will reduce the danger and inspection time of these dynamic environments. While also supporting the detection of invasive algae in areas like Maunaloa Bay.
Team RoSE: Project PETAL	8	Project PETAL a multi-university research team led by students at UH Manoa focusing on developing plans for power management and distribution architecture for lunar habitation. The team has qualified as national finalists out of a pool of 150+ applicants for 2026 NASA RASC-AL Competition.
Team RoSE: Rover Team	7	The Rover Team creates an emulated Mars rover to compete in the annual University Rover Challenge Competition against 100+ university teams from around the world. The rover is designed to traverse rough terrain, manipulate objects using a custom 5-axis robotic arm, and analyze subsurface soil samples for life using a custom soil coring system.
Team: Rainbow Warrior Racing	1	Rainbow Warrior Racing is a Formula-style, fully electric race car designed, modeled, and built from the ground up by a team of engineers. We compete at Michigan International Speedway against universities from around the world in the prestigious Formula SAE Electric International Competition.
Time Domain Electromagnetic Induction (TD-EMI) for UXO Detection	3	As part of the Hawaii UXO Initiative (HUI), the TD-EMI team is investigating challenges of current state-of-the-art metal detector technologies, and developing solutions for specific use in Hawaii's challenging magnetic soils and volcanic tropical terrains.
UH Energy and Sustainability	11	UH Energy and Sustainability's mission is to support the University of Hawai'i's commitment to achieving net-zero energy by 2035 and carbon neutrality by 2050. Through our projects, we strive to enhance renewable energy adoption, improve energy efficiency, and develop innovative solutions for energy storage and demand response.
UHABS-10	9	UHABS-10 is a senior design project that deploys a high-altitude balloon satellite system engineered to carry advanced payloads to near-space altitudes while demonstrating a fully integrated autonomous recovery system.
University of Hawaii Drone Technologies (UHDT): Hardware	5	UHDT aims to design, fabricate, and integrate an autonomous unmanned aerial system (UAS), including a hexacopter platform with onboard power distribution, flight control systems, and modular sensor payloads, to support high-precision unexploded ordnance (UXO) detection operations.
University of Hawaii Drone Technologies (UHDT): Software	4	UHDT aims to develop and implement advanced signal processing, sensor fusion, and autonomous navigation algorithms capable of enabling real-time detection, geolocation, and classification of subsurface UXO targets.
UXO	2	The Hawaii UXO Initiative (HUI) is a multi-disciplinary research group investigating the detection of unexploded ordnance in Hawaii. Different sensor modalities, including time-domain electromagnetic induction (TD-EMI), polarized and synthetic aperture radar (SAR), infrared imaging, and acoustic/seismic detection, are tested to increase detection in Hawaii's challenging magnetic soils. Integration of sensors onto heterogeneous robotics, including quadcopter, hexacopter, and quadruped ground vehicles, is tested to enhance personnel safety and increase access in rough terrain.

# Coral Lounge Student Project Layout



- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Rainbow Warrior Racing</li> <li>2. UXO</li> <li>3. Time Domain Electromagnetic Induction (TD-EMI) for UXO Detection</li> <li>4. University of Hawaii Drone Technologies (UHDT): Software</li> <li>5. University of Hawaii Drone Technologies (UHDT): Hardware</li> <li>6. Team Hokulele</li> <li>7. Team RoSE: Rover Team</li> <li>8. Team RoSE: Project Petal</li> <li>9. UHABS-10</li> <li>10. Hawaii's Aspiring Aerospace Engineering Academy: Ground Station and Satellite Project   Synthesizing Trajectory for Air Traffic Control Purposes</li> </ol> | <ol style="list-style-type: none"> <li>11. UH Energy and Sustainability</li> <li>12. Remote Health Monitoring Using Channel State Information (CSI)</li> <li>13. Investigating 3U CubeSat Radar Feasibility for Detecting Sub-10 cm Orbital Debris</li> <li>14. Cleanroom Hawaii Internship Program (CHIP)</li> <li>15. Nanocomposites Employing Nanoforest Technology 3d Printing Technologies for Polymers and Ceramics</li> <li>16. Reconfigurable Intelligent Surfaces</li> <li>17. Team 'ĀiNA</li> </ol> |
|--|---|
- ★ Engineering Alumni Association of the University of Hawaii(EAAUH)/Parking Validation

# Coral Ballroom Student Project Layout



- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>18. Hawaii State Science Fair Selection: Characterizing Sargassum Polyphyllum for Use in Biodegradable 3D-Printing Supports</li> <li>19. Hawaii State Science Fair Selection: Using AI Object Detection to Detect Wildfires Through Aerial Footage Manoa Astronomical Technologies (MAT)</li> <li>20. Manoa Astronomical Technologies (MAT)</li> <li>21. Team Camrock</li> <li>22. Micro VIP</li> <li>23. Team Kanaloa: RIP-C</li> <li>24. Team Kanaloa: RIP-FF</li> </ol> | <ol style="list-style-type: none"> <li>25. ASCE: Concrete Canoe</li> <li>26. ASCE: General</li> <li>27. ASCE: Steel Bridge</li> <li>28. Smart Campus Energy Lab (SCEL)</li> <li>29. ALL-IN-FREEK-s</li> <li>30. Hawaii Space Flight Laboratory (HSFL): Neutron-2</li> </ol> |
|---|---|

# AWARDEES

## Distinguished Alumni



Greg Hiyakumoto  
*R.M. Towill Corporation*

## Outstanding Service



Dayna Nemoto-Shima & Brandon Shima  
*Pacific Geotechnical Engineers, Inc.*



*University of Hawai'i*

## Dean's Award of Excellence



Bharath Kadaba  
*Lu Labs*

# STUDENT FEATURE



The **UXO Project** is an exciting mission where University of Hawai'i students and teachers are using "high-tech" tools to help clean up the Mākuā Military Reservation. The project focuses on finding UXO, which stands for Unexploded Ordnance. For many years, the military used this land for practice, which left behind old, unexploded bombs that can be dangerous. The team's goal is to find these objects safely so the land can eventually be restored.

# LIVE AUCTION

Help us raise additional much-needed funds for our students by bidding on our fabulous auction packages at the conclusion of tonight's program! We accept cash, check, and credit card. *Mahalo to our prize donors and the Engineering Alumni Association of UH for their assistance in running this event.*

ITEM	MSRP/RETAIL VALUE	STARTING BID
<p><b>#1 Pickleball in Paradise Package</b> Be the star of the court! This package includes:</p> <ul style="list-style-type: none"> <li>-2 stylish, high quality custom College of Engineering Yobi Series III 16mm paddles</li> <li>-2 custom Yobi cases</li> <li>-A deluxe College of Engineering swag gift basket</li> </ul> <p><i>Donated by Yobi owner/CoE alumnus, Bruce Ushijima, and the College of Engineering</i></p>	\$460.00	\$200
<p><b>#2 Recruiter's Dream Package</b> Perfect for any company wanting to dominate the College of Engineering recruiting space! You get:</p> <ul style="list-style-type: none"> <li>-A single booth at the Fall 2026 Career Expo ( on 9/18/26) in YOUR LOCATION of choice, without having to fight with the masses on registration day (**Priceless)</li> <li>-A College of Engineering-produced video promoting your company (and filmed on location in your office!) featuring our Engineering Student Ambassadors, shared on our social media platforms</li> <li>-A deluxe College of Engineering swag gift basket</li> </ul> <p><i>Donated by the College of Engineering</i></p>	\$1800+	\$900
<p><b>#3 Staycation Lovers Package</b> Even engineers need to unwind! Take a break from the grind and enjoy a first-class staycation, including:</p> <ul style="list-style-type: none"> <li>-A 2-night stay at the Hilton Hawaiian Village, including 1 onsite breakfast for 2</li> <li>-\$200 gift card to Duke's Waikiki</li> <li>-\$200 gift card to Hula Grill Waikiki</li> </ul> <p><i>Donated by the Hilton Hawaiian Village, Duke's Waikiki, and Hula Grill Waikiki</i></p>	\$1,100.00	\$600
<p><b>#4 Travel Getaway Package</b> Looking for a summer getaway? With this package, you'll enjoy:</p> <ul style="list-style-type: none"> <li>-2 Roundtrip tickets on Southwest Airlines to any U.S. destination for travel through November 30, with 2 bags per person included</li> <li>-\$250 gift card to Keoki's Paradise, Kauai</li> </ul> <p><i>Donated by Southwest Airlines and Keoki's Paradise</i></p>	\$1,450.00	\$700
<p><b>#5 Travel Getaway Max Dining Package</b> Here's another chance at a summer getaway, with double the dining! You get:</p> <ul style="list-style-type: none"> <li>-2 Roundtrip tickets on Southwest Airlines to any U.S. destination for travel through November 30, with 2 bags per person included</li> <li>-\$250 gift card to Leilani's on the Beach, Maui</li> <li>-\$200 gift card to Duke's Maui</li> </ul>	\$1,650.00	\$800

# MENU

**Arugula Salad** (Baby Arugula, Kula Strawberry, Watermelon Radish, Crispy Onion, Almonds),  
**Roasted Strawberry Vinaigrette**

**Braised Beef Shortribs, Bordelaise Sauce\*** with Fresh Hawaiian Catch, Pineapple Demi,  
**Molokai Mash Potatoes, Chef's Selection of Seasonal Vegetables**

**Mango & Lilikoi Mousse Cake /Black Forest Cake Duet**

**Dinner Rolls**

**Hawaiian Blend Coffee – Decaffeinated Coffee - Tea**

*\*OR select our vegetarian/vegan dinner option - Ali'i Mushroom Adobo with Pickled Local  
Fresh Vegetables, Garlic Cilantro Fried Rice, Mushroom Puree, Umami Adobo Jus*

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# ENTERTAINERS

**TRISTAN ALDEGUER**  
Emcee

Hensel Phelps

**EULAMAI TINGCO**  
Vocals

Civil Engineering '25  
Hometown: Ewa Beach  
High School: James Campbell

**RYDEN OMINE**  
Ukulele

Major: Mechanical Engineering  
Hometown: Pearl City  
High School: Pearl City High School



# MAHALO!

*...to the gracious sponsors of our 26th annual Banquet!*

## LEGENDS

KAI Hawai'i  
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Community Planning & Engineering, Inc.  
Dayna Nemoto-Shima  
Engineering Alumni Association of the University of  
Hawai'i  
Hawaiian Dredging Construction Company, Inc.  
Maryl Group

Okahara & Associates  
ParEn, Inc. (DBA Park Engineering)  
Queen's Medical Center, The  
R.M. Towill Corporation  
Ronald N.S. Ho & Associates, Inc.  
Stanford Carr Development, LLC  
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Yogi Kwong Engineers, Inc.

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Clay & Glenn  
Coffman Engineers, Inc.  
Dayna Nemoto-Shima  
Element Environmental  
Engineering Concepts, Inc.  
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Hawai'i Gas  
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Company, Inc.  
Hawaiian Electric Industries  
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Promark Corporation  
Roy Abe



COLLEGE OF ENGINEERING

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