

Jonathan Wallen

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Motivated and diversely skilled mechanical engineer seeking a senior roll developing hardware systems for autonomous robots. Prepared to manage projects and people to ship successful products.

EDUCATION

UNIVERSITY OF HAWAII HONOLULU, HI

PHD CANDIDATE IN MECH. ENGINEERING

Expected Graduation: May 2025

Research Focus: Autonomous Robotics; State Estimation and Control

MS IN MECH. ENGINEERING Oct 2021

BS IN MECH. ENGINEERING May 2019

LINKS

Personal Site/Virtual Portfolio://[Inspired-Engineering](#)
LinkedIn:// [J. Wallen](#)
GitHub:// [jwallen30](#)

SKILLS

Project Management • Leadership • Time Management

HARDWARE

Mechanical & Electrical System Design • CAD Design • GD&T • DFM • Machining • Prototyping • Woodworking • Field Testing

AUTOMATION

Optimization • State Estimation • Regression & Modeling • Control Theory

SOFTWARE

Solidworks • Onshape • AutoDesk • Adobe Creative cloud • MacOS • Windows • Microsoft Office • Linux

PROGRAMMING

Matlab • Unix • GitHub • \LaTeX • Python • C • R.O.S.

References available upon request.

EXPERIENCE

BUILT ROBOTICS, SAN FRANCISCO, CA

SENIOR ROBOTICS HARDWARE ENGINEER | MAY 2022 - OCT 2022

ROBOTICS HARDWARE ENGINEER | JAN 2022 - MAY 2022

- Promoted for shipping multiple quick-turn projects in first five months.
- Designed robust hardware systems to convert construction equipment into autonomous robots.
- Designed first production run of hardware system and coordinated supply chain with manufacturers.
- Led mechanical engineering efforts and was backup hardware team lead.

ROBOT AUTONOMY & NAVIGATION LAB, HONOLULU, HI

LAB MANAGER AND RESEARCHER | JAN 2019 - DEC 2021

- Supervised day to day lab operations and planned long term logistics.
- Performed novel underwater robotics research.
- Mentored 15 undergraduate researchers.

UNIVERSITY OF HAWAII, HONOLULU, HI

MECHANICAL ENGINEERING TEACHING ASSISTANT | JAN 2020 - MAY 2021

- Delivered lecture, office hours to students and assisted faculty.

MAKAI OCEAN ENGINEERING, WAIMANALO, HI

MECHANICAL ENGINEER INTERN | JAN 2018 - JAN 2019

- Performed assembly and validation for a novel AUV.
- Designed GD&T parts for mechanical, hydraulic, pneumatic and electrical systems.
- Conducted field testing at sea and mobilization operations.

GENERAL CONTRACTING | SOLE PROPRIETOR

Fall 2017 - Fall 2021 | Honolulu, HI

- Managed and ran business operations with clients and subcontractors.
- Performed design and building tasks.

PUBLICATIONS

Selected:

- Jonathan Wallen, Nic Ulm and Z. Song. Underwater Docking System for a Wave Energy Converter based Mobile Station. MTS/IEEE OCEANS Conf., Seattle, Washington, October 2019
- See all ...

AWARDS & GRANTS

U.S. Dept. of Energy Ocean Observing Prize Winning Team	\$67 K	2021
U.S. Dept. of Energy Marine Energy Collegiate Comp. Winning Team	\$15 K	2020
University of Hawaii at Manoa UROP Grant	\$10 K	2018
S-STEM Scholarship	\$14 K	2017