

Abdullah Altawaitan

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EDUCATION

Ph.D. Electrical Engineering	University of California San Diego Intelligent Systems, Robotics & Control	La Jolla, CA 2026
M.S. Electrical Engineering	Arizona State University Control Systems	Tempe, AZ 2019
B.S. Electrical Engineering	Arizona State University Summa Cum Laude	Tempe, AZ 2017

EXPERIENCE

Assistant Professor, Kuwait University. Assistant Professor in the Department of Electrical Engineering.	2026–Present
Graduate Researcher, Existential Robotics Lab. Worked on machine learning and control for autonomous robot navigation.	2021–2026
Project Engineer, Honeywell. Worked on distributed control systems for the oil and gas industry.	2020–2021
Intern, Kuwait University Construction Program. Received on-site training in electrical engineering.	2017

PUBLICATIONS

Journal Articles

- [J3] **A. Altawaitan**, J. Stanley, S. Ghosal, T. Duong, and N. Atanasov, “Learned IMU Bias Prediction for Invariant Visual Inertial Odometry”, *IEEE Robotics and Automation Letters (RA-L)*, 2025.
- [J2] C. Nguyen, **A. Altawaitan**, T. Duong, N. Atanasov, and Q. Nguyen, “Variable-Frequency Model Learning and Predictive Control for Jumping Maneuvers on Legged Robots”, *IEEE Robotics and Automation Letters (RA-L)*, 2025.
- [J1] T. Duong, **A. Altawaitan**, J. Stanley, and N. Atanasov, “Port-Hamiltonian Neural ODE Networks on Lie Groups For Robot Dynamics Learning and Control”, *IEEE Transactions on Robotics (T-RO)*, 2024. **Best Paper Award (IEEE RAS TC on Robot Control) and Honorable Mention for Best Paper Award (IEEE T-RO).**

Conference Papers

- [C2] **A. Altawaitan**, and N. Atanasov, “Adapting Neural Robot Dynamics on the Fly for Predictive Control”, *IEEE Conference on Decision and Control (CDC)*, 2026.
- [C1] **A. Altawaitan**, J. Stanley, S. Ghosal, T. Duong, and N. Atanasov, “Hamiltonian Dynamics Learning from Point Cloud Observations for Nonholonomic Mobile Robot Control”, *IEEE International Conference on Robotics and Automation (ICRA)*, 2024.

Theses

- [T2] **A. Altawaitan**, “Online Model Learning and Control for Autonomous Robot Navigation”, Ph.D. Dissertation, University of California San Diego, La Jolla, CA, 2026.
- [T1] **A. Altawaitan**, “Modeling, Design, and Control of Multiple Quadrotors”, M.S. Thesis, Arizona State University, Tempe, AZ, 2019.

TALKS

- “Hamiltonian Dynamics Learning from Point Cloud Observations for Nonholonomic Mobile Robot Control”, IEEE International Conference on Robotics and Automation, Yokohama, Japan, 2024

SERVICES

Reviewer	IEEE Robotics and Automation Letters	2026
Reviewer	IEEE/RSJ International Conference on Intelligent Robots and Systems	2025
Reviewer	IEEE Robotics and Automation Letters	2024

HONORS AND AWARDS

Best Paper Award , IEEE RAS Technical Committee on Robot Control	2025
Honorable Mention for Best Paper Award , IEEE Transactions on Robotics	2025
Ph.D. Scholarship , Kuwait University	2021–2026
M.S. Scholarship , Ministry of Higher Education, Kuwait	2017–2019
Outstanding Graduate Award , Ministry of Higher Education, Kuwait	2017
Dean's list , Arizona State University	2015–2017
Undergraduate Scholarship , Ministry of Higher Education, Kuwait	2012–2017

MENTORING

M.S. Students: Pranav Kulkarni (2025), Jason Stanley (2024-2025), Aram Chemishkian (2024-2025), Tzu-Chin Ho (2024-2025), Aviral Gupta (2024-2025), Soumil Paranjpay (2024), Brandon Szeto (2024), Vrutik Shah (2023-2024), Vladimir Rubtsov (2023-2024), Rishabh Bhattacharya (2023), Sambaran Ghosal (2022-2023)

Undergraduate Students: Jason Stanley (2022-2023), Behrad Rabiei (2022), Adin Ackerman (2022), Anthony Tseng (2022)