Julio E. Chávez Dorado

Ph.D. Student · Mechanical Engineering

University of Washington, Seattle, WA

jechavez@uw.edu; julio.chavez.dorado@gmail.com | Julio-Chavez | juliochavezdorado

Education

University of Washington — *Seattle, Washington, USA*
PhD Mechanical Engineering — *2021 - present*
- Advisor: Dr. Michelle DiBenedetto

The University of Texas at Austin — *Austin, Texas, USA*
MS Civil Engineering — *2019 - 2021*
- Advisor: Dr. Blair Johnson

Universidad Autónoma Gabriel René Moreno — *Santa Cruz, Bolivia*
BS Civil Engineering — *2012 - 2017*
- Advisor: Dr. Francisco García-Gutiérrez

Professional Experience

2021 - pres.	**Graduate Research Assistant**, University of Washington
2022 - 2023	**Graduate Teaching Assistant**, Mechanical Engineering, University of Washington
2019 - 2021	**Graduate Research Assistant**, The University of Texas at Austin
2018 - 2019	**Engineer-in-Training**, Demo Construction Company
2018 - 2019	**Intern**, Santa Cruz Government - Infrastructure Division
2015 - 2016	**Undergraduate Research Assistant**, Civil Engineering, Universidad Autónoma Gabriel René Moreno

Awards, Fellowships, & Grants

2023	**Link Foundation Fellowship**, The Link Foundation
2021	**Riley Family Endowed Fellowship in Mechanical Engineering**, University of Washington
2020	**George J. Heuer, Jr. Ph.D. Endowed Graduate Fellowship**, The University of Texas at Austin
2019	**Fulbright Fellowship**, U.S. Department of State **Walter L. and Reta Mae Moore Graduate Fellowship in Water Resources**, The University of Texas at Austin
2017	**Opportunity Funds Scholarship**, U.S. Department of State
2015	**Undergraduate Research Fellowship**, Universidad Autónoma Gabriel René Moreno
2014	**Undergraduate Excellence Scholarship**, Universidad Autónoma Gabriel René Moreno
2008 - 2011	**Abraham Lincoln Scholarship**, U.S. Department of State

Presentations

** presenting author*

Contributed Presentations

Chávez-Dorado, J.*, Scherl, I., DiBenedetto, M. (2022). Data-driven technique for decomposing the relative effects of waves and turbulence. Oral Presentation: *American Physical Society Division of Fluid Dynamics Meeting*, Washington, DC.

Chávez-Dorado, J.*, Scherl, I., DiBenedetto, M. (2023). Data-driven decomposition of the relative effects of surface waves and turbulence on velocity measurements. Poster: *Waves in Sea Environment Meeting*, Princeton, New Jersey.

Baker, L.*, Aggarwal, A., **Chávez-Dorado, J.**, Garrey, I., DiBenedetto, M. (2023). Buoyant, Non-Spherical Particles in Turbulent Wind-Driven Waves. Oral Presentation: *Waves in Sea Environment Meeting*, Princeton, New Jersey.

Chávez-Dorado, J.*, Baker, L., DiBenedetto, M. (2022). Wave-turbulence decomposition of particle trajectories. Oral Presentation: *American Physical Society Division of Fluid Dynamics Meeting*, Indianapolis, Indiana.

Baker, L.*, Aggarwal, A., **Chávez-Dorado, J.**, Garrey, I., and DiBenedetto, M. (2022). Buoyant, Non-Spherical Plastic Particles in Turbulent Wind-Driven Waves. Oral Presentation: *American Physical Society Division of Fluid Dynamics Meeting*, Indianapolis, Indiana.

Baker, L.*, Aggarwal, A., **Chávez-Dorado, J.**, Garrey, I., and DiBenedetto, M. (2022). Buoyant, Non-Spherical Plastic Particles in Turbulent Wind-Driven Waves. Oral Presentation: *American Geophysical Union Fall Meeting*, Chicago, Illinois.

Baker, L.*, Aggarwal, A., **Chávez-Dorado, J.**, Garrey, I., and DiBenedetto, M. (2022). Buoyant, Non-Spherical Plastic Particles in Turbulent Wind-Driven Waves. Oral Presentation: *Atmospheres, Oceans, Earths—Unifying perspectives on geophysical and environmental multiphase flows, KITP*, Santa Barbara, California.

Chávez-Dorado, J.* and Johnson, B. (2021). Volumetric Discharge Measurements in an Open Channel Employing Surface Particle Image Velocimetry. Poster: *14th International Surface Particle Image Velocimetry Symposium*, Chicago, Illinois.

Chávez-Dorado, J.* and Johnson, B. (2020). Volumetric flow rate measurement via surface imaging techniques. *American Geophysical Union Meeting*. Poster: Virtual conference.

Hernandez, O., **Chávez-Dorado, J.***, Escalante, J., Huarachi, D., Saravia, N., Vedia, M., and Viamonte, D. (2016). Self-priming siphon use for the generation of electric energy. Poster: *II National Science and Technology Fair*, Sucre, Bolivia.

Hernandez, O., **Chávez-Dorado, J.***, Escalante, J., Huarachi, D., Saravia, N., Vedia, M., and Viamonte, D. (2015). Self-priming siphon use for the generation of electric energy. Poster: *National Congress of Renewable Energies*, Cochabamba, Bolivia.

Teaching Experience

Winter 2023	**Incompressible Flows (ME 507)**, Teaching Assistant
Winter 2022	**Fluid Mechanics (ME 333)**, Teaching Assistant

Outreach & Professional Development

Service and Outreach

2022	**United Way of King County**, Tax Preparer	*Seattle, Washington, USA*
2020	**Foundation Communities**, Tax Preparer	*Austin, Texas, USA*
2016 - 2018	**Tu Ciencia Joven**, Technology Organizer	*Santa Cruz, Bolivia*
2016 - 2017	**Flying Doctors of America**, Spanish - English Interpreter	*Santa Cruz, Bolivia*

Professional Memberships

American Physical Society
American Geophysical Union