Adam Hall

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EDUCATION

University of California San Diego

La Jolla, CA

PhD in Mechanical Engineering, GPA: 3.83/4

2022 - Present

Union College

Schenectady, NY

Bachelor of Science in Mechanical Engineering, GPA: 3.98/4

2017 - 2021

RESEARCH EXPERIENCE

Graduate Student Researcher, University of California San Diego

PI: Dr. Sutanu Sarkar, Dr. Sophia Merrifield

2022 - Present

• Simulating flow past a disk in stratified environments at high Reynolds numbers

Undergraduate Researcher, Union College

PI: Dr. Ali Hamed

2020 - 2021

• Analysis of flow over bar roughness in turbulent boundary layers and effect of fluid injection

PUBLICATIONS

Hamed, A.M., O'Brien, C.T., **Hall, A.J.**, Gallary, R.M., DaRosa, J.J., Goddard, Q.L., & McAtee, B.R. Flow organization in the near wake of isolated and sheltered 2D bar roughness elements. *Physical Review Fluids* **8**, 2 (2023). 10.1103/PhysRevFluids.8.024602

Hamed, A.M., Nye, C.E. & **Hall, A.J.** Effects of localized blowing on the turbulent boundary layer over 2D roughness. *Experiments in Fluids* **62,** 163 (2021). doi.org/10.1007/s00348-021-03261-0

TEACHING EXPERIENCE

Teaching Assistant, University of California San Diego

• Aerodynamics

Spring 2025

• Introductory Fluid Mechanics

Fall 2023, Fall 2024

PROFESSIONAL PRESENTATIONS

• Wake Growth in Nonlinear Stratification

18th Southern California Flow Physics Symposium, Los Angeles, CA

Apr 2025

• Wake Growth in Nonlinear Stratification

77th Annual Meeting of the APS Division of Fluid Dynamics, Salt Lake City, UT

Nov 2024

• Time-Resolved 3D Measurements of the Flow Surrounding 2D Isolated and Tandem Roughness Elements

31st Annual Steinmetz Symposium, Union College, Schenectady, NY

May 2021

HONORS AND AWARDS

Naval Innovation, Science and Engineering Center (Inaugural Cohort, 2024) NSF GRFP Honorable Mention (2023)

Tau Beta Pi Fellow (2022-2023)

SOFTWARE SKILLS

Languages: Fortran, MATLAB, Python Computational Methods: MPI, HPC

MENTORING EXPERIENCE

UCSD MAE Graduate Student Council, Vice President

2023 – Present