

Jacob M Steinberg

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EDUCATION

UNIVERSITY OF WASHINGTON

College of the Environment
School of Oceanography | Seattle, WA
2013-present

M.S. - APPLIED MATHEMATICS

Dec 2016

M.S. - OCEANOGRAPHY

June 2016

UNIVERSITY OF MARYLAND

B.S. - CIVIL AND ENVIRONMENTAL
ENGINEERING
May 2013 | College Park, MD
Magna Cum Laude
MINOR: PROJECT MANAGEMENT

COURSEWORK

Differential Equations
Fluids Mechanics
Geophysical Fluid Dynamics
Computational Methods for Data Analysis
Numerical Analysis
Complex Analysis
Waves
Ocean Circulation
Environmental Engineering
Mechanics of Materials
Probability and Statistics (in Eng.)
Vector Calculus
Engineering Project Management

TECHNICAL SKILLS

PROGRAMMING, DATA ANALYSIS

CURRENT

Python • \LaTeX • Matlab

PAST

Microsoft Office

FAMILIAR

Processing

SYSTEMS & FRAMEWORKS

Mac OS • Windows • Unix

RESEARCH

UNIVERSITY OF WASHINGTON

School of Oceanography | Seattle, WA
GRADUATE STUDENT RESEARCHER / DOCTORAL CANDIDATE | Aug 2013 - present
Interests: behavior, interactions, and evolution of ocean eddies; energetics of quasi-geostrophic flows; use of Seaglider & Deepglider AUVs

UNIVERSITY OF DELAWARE

Department of Oceanography | Lewes, DE
INTERNSHIP: RESEARCH EXPERIENCES FOR UNDERGRADUATES | Summer 2012
Conducted ocean sea-spray and air-sea exchange research in a laboratory setting. Used high speed imaging instruments in a wind-wave tank facility to simulate ocean behavior.

N.O.A.A.

National Centers for Coastal Ocean Science | Silver Spring, MD
DATA ANALYST | Dec 2011 - May 2013
Analyzed estuary health data to understand impacts/effects of eutrophication. Assessed effectiveness of the use of bioextraction technologies to mitigate nutrient pollution. (2015) (2018, in prep)

UNIVERSITY OF MARYLAND

Honors College | College Park, MD
RESEARCH THESIS | Aug 2012 - May 2013
Explored the ability of mangrove forests to mitigate tsunami damage using satellite imagery.

TEACHING

UNIVERSITY OF WASHINGTON

School of Oceanography & School of Applied Mathematics
TEACHING ASSISTANT | Seattle, WA
Introduction to Fluid Mechanics (OCN 511) Winter 2015-16
Physics Across Oceanography: Fluid Mechanics and Waves (OCN 285) Autumn 2017
Geophysical Fluid Dynamics I (OCN 512) Winter 2018-19

OCEAN INQUIRY PROJECT

FIELD INSTRUCTOR, DIVER | Puget Sound Area
Instruct and engage with students as we collect and interpret oceanographic measurements/samples out on Puget Sound. 2014 - present

VOLUNTEER/OUTREACH

NATIONAL OCEAN SCIENCES BOWL: ORCA BOWL | Science Judge 2014-present
PACIFIC SCIENCE CENTER: POLAR SCIENCE WEEKEND | Presenter 2014-present
HAZEL WOLF K-8 STEM SCHOOL | Presenter 2016-present

LEADERSHIP

STUDENT ADVISORY COMMITTEE: MEMBER | U. of Washington 2017-present
Liaison between the graduate student population and College faculty and administration

PUBLICATIONS

Steinberg, J.M., Pelland, N.A., Eriksen, C.C.. 2018. "Observed Evolution of a California Undercurrent Eddy". Journal of Physical Oceanography, E.O.R.

Pelland, N.A., Bennett, J.S., Steinberg, J.M., Eriksen, C.C.. 2018. "Automated Glider Tracking of a California Undercurrent Eddy using the Extended Kalman Filter". Journal of Atmospheric and Oceanic Technology, Vol. 35, 2241-2264