

JESSICA HOLMES

LAFAYETTE CO, 80026 | PHONE: (714) 833-1531 | EMAIL: JESSICAHOLMES2015@GMAIL.COM

EDUCATION

UNIVERSITY OF COLORADO, BOULDER CO – M.S. in Applied Mathematics 2021-2023

UNIVERSITY OF OREGON, EUGENE OR – B.Sc. in Mathematics 2018-2021

FULLERTON COLLEGE, FULLERTON CA – Higher Education in Computer Science and Mathematics 2015-2018

SKILLS

PYTHON (NUMPY, SYMPY, PANDAS)

SQL

R, JUPYTER LAB, JAVA

CLOUD COMPUTING

DATA ANALYSIS & VISUALIZATION

GIT, MICROSOFT SUITE

EXPERIENCE

GRADUATE RESEARCH ASSISTANT May 2022 – Present

Graduate research assistant at the National Center for Atmospheric Research (NCAR) working on a project focused on reducing uncertainty in our current estimates of global carbon flux by improving regional marine biogeochemical projections using a combination of analytical and numerical modeling techniques.

EXPERT PANELIST May 2024

Served as an expert panelist at the 'Day of Discovery: Oceans' Event held at Souring Heights PK-8 in Eerie, CO. Responsibilities included answering student questions regarding the role of oceans in Earth system processes and climate evolution as well as led hands-on activities explaining ocean characteristics and behavior.

GRADUATE PEER MENTOR Aug 2023 – Dec 2023

Responsibilities include providing support and guidance to incoming graduate students as they transition into their first year of graduate school.

SPONSORED UNDERGRADUATE RESEARCH PROGRAM: COMBINATORICS Jul 2020 – Aug 2020

Focused on describing standard young tableaux of shortest orbit under the promotion operator defined in terms of Schützenberger's *jeu de taquin* construction.

PAPER MARKER – UNIVERSITY OF OREGON

Provided detailed feedback to deepen each student's understanding of course material and increase chances of achieving course objectives/outcomes. Relevant courses include:

Math 112 Elementary Functions Fall 2019

Math 343 Statistical Models and Methods Spring 2019

EUGENE YOUTH MATH FESTIVAL VOLUNTEER – UNIVERSITY OF OREGON Feb 2019
Helped introduce young students to a wide variety of mathematical topics through games, problem solving, and hands-on activities.

PRIVATE MATH TUTOR Fall 2016 – Spring 2018
Subjects including Statistics, Calculus I-II, Trigonometry, and Algebra 2

FELLOWSHIPS, AWARDS, AND ACKNOWLEDGEMENTS

Dean’s Future Leaders Fellowship Spring 2024
\$2500 awarded to students who exhibit strong potential to become future leaders in their field.

Dean’s Fellowship of Excellence Spring 2024
\$5000 awarded to students who have achieved an excellent academic record and show strong potential as researchers in their field.

E.E. and E.J. Decou Prize in Mathematics Spring 2021
\$2500 awarded to two undergraduate seniors, “displaying exceptional achievement in mathematics, chosen from among the best and the brightest”.

Dean’s Honors List, Fullerton College Fall 2016
Awarded to students who officially complete 12+ degree applicable units in a semester and earn a grade point average between 3.0 and 3.74.

PROFESSIONAL AFFILIATIONS

Student Member of the Society for Industrial and Applied Mathematics (SIAM) Since 2021

Institute for Mathematical and Statistical Innovation (IMSI) Since 2021

Climate and Global Dynamics (CGD) Laboratory
at the National Center for Atmospheric Research (NCAR) Since 2022

Member of the Association of Women in Mathematics (AWM) Since 2022