Jessica Jagdeo

jjagdeo@bren.ucsb.edu | (321) 277-3494 | Santa Barbara, CA | LinkedIn

EDUCATION

Master of Environmental Science and Management (June 2020)
Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)
Specialization: Water Resources Management | Focus: Environmental Data Science
Highlighted Coursework: Groundwater Management, Environmental Biogeochemistry, Sustainable Watershed Quality Management, Data Analysis, Geographic Information Systems
Leadership: Diversity Committee Student Representative, Environmental Justice Club Co-Chair

Bachelor of Science in Geology, Cum Laude, 3.89 GPA (May 2018)
University of Florida (UF), Gainesville, FL
Scholarships: Gates Millennium Scholarship, American Institute of Professional Geologists National Scholarship, National Association of Geoscience Teachers Field Study Scholarship, Florida Bright Futures Scholarship

MASTER'S GROUP CONSULTING PROJECT

Quantifying Climate Change Impacts to the City of Santa Barbara Water's Supplies (4/19–Present)
Role: Co-Data Manager | Client: City of Santa Barbara Public Works Department

- Working as part of a multidisciplinary 4-person team to quantify the climate-driven effects of temperature, precipitation, wildfire, and sedimentation on the City's water supply up to the year 2100
- Organizing, analyzing, and visualizing water supply and bathymetric/sedimentation data using R
- Modelling future estimates of the Santa Ynez Watershed's discharge using the Soil & Water Assessment Tool (SWAT) and Cal-Adapt's anticipated future climate-drive changes in temperature and precipitation

EXPERIENCE

Water Systems Optimization – Water Resources Intern, San Francisco, CA (6/19–9/19)

- Devised a systematic method for processing water production data using R; ran scripts to process water utilities' billing data that were utilized to quantify the amount of water supplied by utilities
- Calculated water volumes needed to conduct three volumetric field tests of a trapezoidal water reservoir and co-authored a 15-page report explaining the field methods, results, and historical State Water Project billing implications of these tests

Orlando Science Center – Camp Counselor, Orlando, FL (5/18–8/18)

- Developed and operated scientific activities related to astronomy and engineering skills for K-12 students
- Supervised camp classes, collaborated with educators, and ensured students' health and well-being

UF Department of Geological Sciences – Geological Field Student, Taos, NM (5/17–6/17)

- Conducted geological field surveying in teams for 5 mapping projects of igneous and metamorphic geology under Dr. Joseph Meert and Dr. Jim Vogl to understand the geological history of the region
- Designed professional maps of each field site using CorelDRAW to visually portray the region's geology
- Presented research on methylmercury water quality implications of the Great Salt Lake to geology colleagues

Stanford University Department of Energy Resources Engineering – Research Assistant, Palo Alto, CA (6/16–8/16)

- Analyzed the environmental, economic, and social effects of hydraulic fracturing activity in North Dakota, identifying economic and social pattern shifts associated with job relocation to Williams County

SKILLS & AFFILIATIONS

Computing: Microsoft Office (Word, Excel, PowerPoint), R, R-Studio, ArcGIS, BASINS, SWAT, and CorelDRAW
Communication: Presented undergraduate research poster at American Geophysical Union Fall Meeting 12/16
Languages: Fluent in Guyanese Creole
Professional Affiliation: American Institute of Professional Geologists, Earth Science Women's Network