

# THOMAS B. WHEELER

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## EDUCATION

**Master of Environmental Science & Management**, GPA: 3.97 (June 2022)

Bren School of Environmental Science & Management — University of California, Santa Barbara (UCSB)

Highlighted Courses: Energy Demand Analysis, Electric Power Markets, Adv. Data Science, Adv. Geospatial Analysis

**Bachelor of Science in Environmental Science; Entrepreneurship — Santa Clara University**, GPA: 3.6 (June 2016)

Capstone Project Manager: *EV Charging Stations in Santa Clara*; Client: Silicon Valley Power; Conducted a spatial analysis to identify optimal locations for 8 new utility-financed EV charging stations. Presented final [poster](#) to client.

## ENERGY SOFTWARE DEVELOPMENT EXPERIENCE & RESEARCH PROJECTS

**Software Developer & Project Manager** | R, R Shiny | Industrial Sustainability Analysis Lab | UCSB Jan/21-Jan/23

- Engineered an [interactive web application](#) to visualize publicly reported data center energy use and sustainability reporting transparency trends from 50 (+) of the largest global technology companies. App aims to support the data center energy use modelers and climate policymakers in better understanding future energy use of the internet.
- Developed a standardized data collection methodology and dataset, a 20-page data entry guide, and 25-pages of documentation used by the student team to conduct further development and maintenance of the app.
- Advised 6 student data processors and software developers to ensure proper data collection and app development.

**Student Researcher** | Django, Python, JavaScript | [energyexplorer.io](#) | UCSB, Electric Power Markets Mar/22-Present

- Developed dashboard to calculate the value of a utility-scale front-of-meter solar energy generation project in CA.
- Enables user to calculate LCOE and NPV of a project based on user defined geographic, engineering, and economic parameters. Dashboard uses solar generation data from NREL and historical locational marginal pricing from CAISO.

## DATA ANALYSIS EXPERIENCE & CONSULTING PROJECTS

**Master's Group Project — Assessing the Value of Information for Shellfish Farmers in B.C.** | R | UCSB Jan/21-Jun/22

Role: Project Mgr. | Client: [Scoot Science](#) | Deliverables: [Final Report](#), [Faculty Review Presentation](#), [Final Presentation](#)

- Developed an economic model to assess the value of environmental information for shellfish aquaculture farmers. Economic model informed the client's market research efforts by helping them quantify potential profitability for B.C. shellfish farmers who invested in environmental monitoring and forecasting tools.
- Managed a 5-person project team, served as primary client contact, facilitated team meetings, collaborated on project tasks, directed project development from [initial proposal](#) to final deliverables.

**Intern — QC Analyst** | Seasonal Decomposition Analysis, Python | [Scoot Science](#) | Remote Jun/21-Sep/21

- Developed a routine to define suspect thresholds (lower and upper bounds) for raw sea surface temperature datasets by calculating the variance in historical sea surface temperature levels using [seasonal decomposition](#).
- Improved Scoot's data quality control pipeline using the routine to flag inbound raw sea surface temperature data that potentially contained inaccurate data. This improvement led to a reduction in Scoot customers viewing incorrect data on their salmon farm management dashboards.

**Dropship Analyst & Account Manager** | Excel | [All Across Africa](#) + [KAZI Goods](#) | San Diego, CA Sep/18-Dec/19

- Generated over \$50k in revenue per quarter through customer relationship-building, product pitching, fulfillment, and invoicing on 10 large accounts (\$5k+ order size) and 200+ independent retailers to reach quarterly sales goals.
- Managed product onboarding, inventory updates, and fulfillment on 8 direct-to-consumer dropship platforms. Grew revenues from dropship platforms by 300% by optimizing listings and product assortment.

**Analyst — Business Development** | QGIS, Land Classification Analysis | [CocoAsenso](#) | Philippines May/17-Aug/18

- Conducted land classification analysis of 5,050 sq. miles across Samar Island using Landsat satellite imagery. Results from spatial analysis were used to advise siting of 3 pilot coconut processing facilities around Samar Island.
- Collected economic data from 48 municipal coconut suppliers via door-to-door surveys. Data informed wholesale buying prices at CocoAsenso's coconut processing facility, improving reliability of operating budget projections.

## SKILLS, CERTIFICATIONS, & PERSONAL ACHIEVEMENTS

**Presentations**: "Reflections with social enterprises on 2 continents", 1600 ppl. audience, Univ. of San Carlos (Nov/17)

**Certifications**: UCSD Data Science & Visualization Bootcamp (Python, SQL, Javascript, ML); GPA: 3.8 (Jan/20 - Jul/20)

**Personal Achievements**: Pacific Crest Trail Thru-hiker — 2,300 miles solo from Mexico to Canada. Walked 20+ miles/day while traversing 25 national forests, 7 national parks, and 400,000+ ft. of elevation change. (Jun/16 - Nov/16)