JOE DECESARO
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EDUCATION
Master of Environmental Data Science, 4.0 GPA (Expected June 2022)
Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)
    <u>Leadership:</u> Class Co-Chair, Dean's Advisory Council Committee Student Representative
    <u>Highlighted Coursework</u>: Statistics, Policy Evaluation, Remote Sensing, Machine Learning, Intro to Data
    Storage and Management, Spatial Analysis, Data Visualization, Scientific Reproducibility
    <u>Honors/Awards</u>: Environmental Data Science Scholarship

Bachelor of Science in Materials Engineering, 3.42 GPA (June 2018)
California Polytechnic State University, San Luis Obispo
    <u>Leadership:</u> Orientation Leader, Triathlon Team Head Bike Coach & MTS Race Sponsorship Lead
    <u>Capstone</u>: Developed engineering methodology to encourage designer accountability for product lifecycle
    <u>Honors/Awards</u>: Dean's List (5 quarters)
    <u>Study Abroad</u>: Universidad de Navarra – Tecnun (7/16–8/16)

MASTER'S CAPSTONE ENERGY DATA SCIENCE PROJECT
Renewable Energy Siting Predictors Observed from National Data for Wind and Solar (9/21–6/22)
Role: Project Manager | **Client:** Grace Wu, UCSB Environmental Studies
- Consolidate multiple spatial large data sources into a raster stack with cohesive extent and coordinate reference system to determine greatest predictors of siting renewable energy utility scale projects.
- Generate prediction map in R of the most likely locations for renewable energy projects in the contiguous US using machine learning methods logistic regression, random forest, and Maxent methods.
- Manage a 4-person team using GitHub to maintain project schedule and ensure client goals are met.

EXPERIENCE
Environmental Engineer Consultant II – Ashworth Leininger Group, Camarillo, CA (1/19–5/21)
- Analyzed data in Excel to determine electrification feasibility, compared emission outputs with natural gas, and wrote a 15-page technical summary for a client to communicate to the California Air Resources Board.
- Managed onsite air, water, and hazardous waste environmental compliance for large glass manufacturing facility for a 6-month period and communicate requirements to operational staff and plant manager.
- Conducted environmental regulatory gap analysis for facilities and developed client specific improvements.
- Developed a Word template for Spill Prevention Countermeasure and Control Plans with senior leadership that meets all regulatory requirements and drives down the cost of generating each plan for clients.

Production Engineer Intern – E&J Gallo Winery, Modesto, CA (6/18–12/18)
- Implemented operation of new manufacturing line with bottling team leadership and operators through continuous improvement strategies like data collection and limiting operational variability.
- Facilitated communication between upper management, maintenance, and operators so that all stakeholders' needs were being communicated and met to ensure smoother production operations.

Manufacturing and Warehouse Intern – PepsiCo, Fresno, CA (6/17–8/17)
- Designed and executed manufacturing loss study by designing experiment and collecting data to present and suggest solutions that limited operator error to factory and regional leadership.
- Standardized procedures for startup and shutdown of the manufacturing facility for all production lines through documentation in a single binder.

TECHNICAL SKILLS
Technical: R (RStudio, Advanced), Python (Jupyter, Familiar), Command Line, SQL (SQLite, Basic), GitHub, Microsoft Office (Word, Excel, PowerPoint, Outlook), Slack, Google Workspace (Drive, Documents, etc.)