Daniel Brown

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Professional Summary

Data Scientist with a strong foundation in mechanical and systems engineering, complemented by a Master's in Data Science from UC Berkeley. Skilled in machine learning, data visualization, and statistical analysis to solve complex technical challenges. Proven leadership in managing cross-functional teams, and delivering impactful results. Passionate about using data-driven approaches to optimize processes and inform decision-making.

Data Science Projects

Global Energy Economics Analysis

- Objective: Analyzed global energy trends to uncover the relationship between GDP, renewable energy adoption, and carbon efficiency.
- Tools: Python, Pandas, Scikit-learn, Matplotlib.
- Results: Identified key GDP thresholds for renewable energy adoption and provided policy recommendations for sustainable energy transitions.
- GitHub: Link to Project Final Paper.

Healthcare Pricing Transparency Project

- Objective: Investigated insurance pricing models in Illinois using NoSQL databases and graph algorithms.
- Tools: MongoDB, Redis, Neo4j, Python, Tableau.
- Results: Discovered pricing inconsistencies and identified clusters of insurance providers, improving transparency in insurance pricing.
- Key Analysis: Applied PageRank and Louvain clustering to reveal connections between hospitals and insurance plans.
- Github: Link to Project Repository.

Education

Master of Information and Data Science

University of California, Berkeley | Expected June 2026

Coursework: Machine Learning, Data Engineering, Data Visualization, Statistics, Research Design

Bachelor of Mechanical Engineering

University of California, San Diego | June 2023

• Coursework: Thermodynamics, Fluid Mechanics, Computational Methods, Linear Algebra, Calculus

Professional Experience

Associate System Engineer

L3 Harris Technologies | 2023 – January 2025

- Led the development and implementation of four major engineering projects, including an underwater tracking system and a phased array antenna system, improving system reliability by 15% securing \$1.3 million in follow up contracts.
- Conducted technical analysis and trade studies to modernize shipboard communication systems and replace obsolete components.

Wildfire Modeling Intern

San Diego Supercomputer Center | 2022 - June 2023

 Collaborated with the WIFIRE modeling team to optimize parameters in deep learning models for analyzing wildfire spread, delivering real-time insights to firefighting teams and modeling over 60 California wildfires.