

Summary

Research and Data Science Professional with success utilizing data to build pragmatic, scalable, and statistically accurate solutions for dynamic data and business requirements. Strengths include defining problem statements, collecting data, building and maintaining data driven optimization models and presenting recommendations to cross functional stakeholders. A reputation for performing data extractions and analysis while working in a fast paced, deadline driven environment.

Education

Johns Hopkins University, Whiting School of Engineering, Baltimore, MD 2021

M.S. Data Science

California State University, Long Beach, Long Beach, CA

M.A. Neuroscience 2010

B.A. Psychology 2007

Technology Skills

R, Python, Jupyter Notebook, SQL, Tableau, QlikView, Adobe Photoshop, Adobe Illustrator, Amazon Web Services, NeuroLucida, Machine Learning Models, Regression, Distributed Database Systems, Recommendation Systems

Professional Experience

MJxC, Beaufort, SC December 2021-Present

Data Scientist, Independent Contractor

Lead the Machine Learning and Data Platform strategy and vision to enable individualized and adaptive fitness coaching to all members of the platform.

- Partner closely with the Founders, engineering, product, and other cross-functional teams to create the product roadmap and to define milestones and success metrics.
- Lead engineering function in the areas of Machine Learning and Data methodologies with clarity on feasibility, time, cost, and impact.
- Define best practices around Machine Learning and Data methodologies, software development, and infrastructure.
- Identify opportunities and challenges in the marketplace with constant evaluation of Machine Learning Data advancements and innovations.

Beaufort Memorial Hospital, Beaufort, SC December 2014-Present

Senior Wellness Coach, Program Coordinator

Fulfill a need for the Wellness Center to identify trends and patterns required to improve operating efficiencies for this nonprofit healthcare facility.

- Build an Executive dashboard and implement trend analysis for C-suite and Department Directors to identify trends in departments including finance, primary care, and intensive care.
- Apply behavioral analytics to analyze frequency, duration, and latency of high-risk behavior and apply linear regression analysis to identify limiting factors for strategic planning and setting client goals.
- Analyze results of statistical reports and identify areas to enhance programs and growth.
- Within the first year of employment contributed to a 48.9% increase in group fitness attendance and a 114.5% increase in training services revenue.
- During the second year of employment contributed to a 34.70% increase in group fitness attendance and 114.51% increase in training services revenue.

California State University, Long Beach, Long Beach CA January 2011- December 2011

Statistics Lecturer

Taught in the psychology and sociology departments in the College of Liberal Arts.

- Prepared and delivered weekly lectures and conducted biweekly laboratory sessions.
- Started innovative teaching strategies, new curricula, and mentored and evaluated students.

Worked with the Primary Investigator and Professor and collaborated with primary investigators and student researchers at Bowdoin, Maine for laboratory and field-based research projects.

- Ensured that statistical and data management reports were generated in a timely manner.
- Collected and archived data from experiments, interpreted complex data, executed and supervised data analysis and presented findings to a multiple stakeholders.
- Developed, documented, and implemented procedures for research projects and experiments.
- Created financial and statistical reports, performed analysis and recommended spending activities.

Volunteer Experience

The Complete Student, Beaufort, SC
Treasurer, Board of Directors

January 2022-Present

Oversee financial planning, procurement, and investment funds for a local nonprofit education organization serving middle and high school students.

- Implemented a new annual expense budget and annual forecasting process.
- Reconciled monthly statements, invoices, and expense accounts, keeping records accurate and current.
- Prepared, interpreted, and presented financial reports, annual budgets, financial plans, and business plans.

Volunteer, Beaufort, SC
Data Science, Analytics Consultant

Performed analysis and delivered data science solutions for clients.

Client: **Sirius Natural Pet Foods**

March 2021-Present

- Designed the website and storefront for this pet food company's Shopify storefront and created an inventory optimization model by matching store inventory with actual needs to reduce requirements for storage space.
- Used a single, global forecast to predict each product as a weighted KPI with weekly updates and monthly forecasts for the store owner.
- Created a bin-packing algorithm to optimize box size selection that improves space efficiencies, decreases costs from wasted box space and lowers shipping costs.
- Increased total sales 617%, yield returning customer rate 100%, increased average order value 139%.

Client: **The Complete Student**, a nonprofit education institution.

January 2021-Present

- Deliver predictive modeling and prescriptive analytics including optimization modeling and decision models to quantify new opportunities, identify upcoming challenges that ultimately increase revenue by 3% for the 2021-2022 school year.
- Use descriptive and diagnostic analytics including descriptive statistics, correlations, clusters, and trends to evaluate revenue, expenditures, to solidify the company's value proposition.
- Research industry standards, use descriptive analysis to identify KPIs for financial operations; faculty salary, experience, and workload; admissions, tuition; academics; student experience; and marketing.
- Apply scenario modeling, simulation with deviation analysis and create a strategic plan to increase student enrollment by 2% and the financial aid budget by \$40,000.
- Created a dashboard comprised of research and data from competitive schools to benchmark success against peers and improve executive decision making, policy development, and strategic planning.
- Collected data and built a data model for fundraising and marketing strategies which helped reach a goal of \$100,000 to build a new Art Center.

Client: **Breakwater Restaurant**, a popular dining destination.

December 2018-May 2019

- Performed analysis of five years of data and used Python to integrate historical data finance and POS-generated sales data.
- Conducted descriptive and diagnostic analyses, built predictive models and conducted prescriptive analyses that improved trend analysis for food and supply needs, staffing and menu planning.
- Created interactive visualizations based on key metrics, enabling executive chefs and owners to identify seasonal trends, identify customer types, target preferred meals and payment options, track inventory, reduce wasted food, predict and reduce waiting time, and analyze employee performance.