

Academic Foundation

My path into data science began during my postdoctoral research at UC Davis in Cliff Saron's lab, where I analyzed EEG data from the Shamatha Project, one of the largest longitudinal meditation studies of its kind. This work required preparing raw EEG signals for analysis using time-frequency methods, principal component analysis, and event-related comparisons. That experience gave me a rigorous foundation in data preprocessing, statistical modeling, and interpreting complex, high-dimensional data. These skills have remained central to my work ever since.

Studying how the brain processes language and cognition also shaped my interest in natural language processing. Even before entering the tech industry, I was already thinking about how humans interact with information, and how raw signals, whether neural or linguistic, can be transformed into insights.

Early Tech Work: From NLP to Product Thinking

I transitioned from academia into tech by building data-driven products. At Acxiom, I developed a chatbot system that allowed sales teams to query large customer data assets in natural language and receive targeted data segments for sale. This was before the rise of modern transformers and LLMs, so I gained expertise in traditional NLP approaches, intent classification, and rule-based systems. That project not only sharpened my technical skills but also sparked my product instincts. I was not just modeling language, I was solving a business problem by enabling a faster and more intuitive sales workflow.

This combination of technical depth and product strategy has defined my career ever since.

Driving Impact at Scale

At Rocket Money, I consistently turned analysis into measurable business outcomes. I proposed and ran an experimental optimization to the billing algorithm, applied rigorous statistical analysis, and productionized the solution. This delivered more than 600,000 dollars in annual savings and had a direct bottom-line impact.

I also built a churn prediction model using XGBoost, experimenting with multiple time-series aggregations and classification models before identifying the optimal approach. The model predicted churn windows at 1, 7, and 14 days, giving the company a forward-looking lens into user engagement. In addition, I developed an engagement classification pipeline in BigQuery and dbt that segmented users into cohorts, which enabled more personalized communication strategies and more accurate lifetime value projections.

Each of these projects reflects my pattern: start with a hypothesis, experiment quickly, validate impact, and then align resources to productionize the work.

Building Products with Data

At Butter, I shifted further into product-facing work while staying deeply hands-on with data. I pitched and wrote the PRD for a Payment Insights dashboard, built an initial proof-of-concept, and then partnered with data engineering and frontend teams to productionize it. The dashboard gave customers such as Classpass and Masterclass visibility into their payment success funnels and BIN-level authorization trends. I presented and delivered the final product to these top-tier clients, which strengthened Butter's customer relationships.

Just as importantly, I helped redirect company focus toward higher ROI projects. For example, after analyzing potential impact and gathering client feedback, I recommended scrapping a planned email communication solution in favor of developing a flexible signals platform that was in higher demand and better aligned with long-term customer needs. This strategic pivot illustrates my ability to connect data insights to product roadmap decisions.

Leadership and Collaboration

Throughout my career, I have mentored colleagues at different levels. At Microsoft, I guided a junior engineer fresh out of undergrad, a relationship that continues today. At Rocket Money, I mentored both a senior analyst and a data scientist, advising on experimental design, analytical rigor, and career growth.

I have also led cross-functional alignment in fast-paced startup environments. At Butter, I managed stakeholder expectations and kept executives, engineers, and product leaders in sync through regular updates, clear deadlines, and resource planning. This enabled my team to deliver the Payment Insights dashboard on time. My leadership style combines structured roadmaps with fast iteration. I like to plan broadly but rely on experiments to guide the actual path, pivoting when results suggest a better direction.

Innovation and Generative AI

If there is a throughline in my career, it is natural language interfaces. From analyzing how the brain processes language, to building early NLP chatbots, to today's generative AI products, I have been preparing to create and evaluate systems where humans interact with information through conversation.

Recently, I built a Retrieval-Augmented Generation (RAG) app that answers interview questions grounded in my own resume and CV. It reflects both my technical ability to prototype with LLMs and my instinct to create practical, user-facing applications. In a sense, I have been training for

this era of AI. I began with traditional NLP and statistical modeling, and now I am advancing into generative AI evaluation and productization.

Future Vision

I am seeking opportunities squarely in the AI engineering space, with a focus on natural language interfaces and LLM evaluation. I thrive in 0 to 1 environments where I can rapidly prototype, prove feasibility, and then partner with engineering and product teams to scale.

My startup experience has made me resourceful and scrappy, while my time at larger organizations such as Microsoft has given me a sense of structure and rigor. I want to pioneer new methods for making AI safer, more reliable, and more effective. My goal is to build systems that free people to be more creative and productive.

Whether developing chat-based products, devising new evaluation techniques for LLMs, or architecting AI-driven agents, I bring a builder's mindset, a strategist's vision, and a track record of turning data into impact.