

TLDR

- Built and led ML teams at three companies. Founded a data startup for optimizing where to live.
- Experienced in developing strategies and roadmaps to optimize company objectives, foster personnel development, and maximize tech feasibility.
- Track record of navigating research-level technical challenges and deploying solutions to production.
- Drawn to critical path challenges that require innovative data science, ML, or AI.

Research and Work Experience

Lat Long Labs

Founder

2023 - 2024

- Founded Lat Long Labs to revolutionize the way people choose where to live.
- Pioneered breakthroughs in personalized financial modeling, creating the first Discretionary Income model tailored to occupation, experience, family composition, and zip code.
- Developed the first constraint optimization model for personalized location searches.
- Managed comprehensive startup responsibilities, including legal affairs, business strategy, investor pitches, product demos, customer interviews, and product-market fit adjustments.

LinkedIn

Tech Lead

2021 - 2023

- Developed and led the *Good to Great to World Class* technical review program, increasing the impact, precision, and accuracy of over 50 data analysts, data scientists, data engineers, and ML engineers.
- Mentored emerging talent and coached data scientists through challenges.

Nike

Senior Director of Search Sciences

2021

- Stabilized and expanded the Search Sciences Team, consisting of 8 data scientists and ML engineers, responsible for search algorithms on nike.com routing over \$1B in purchasing power. Resolved development impasse and launched the first mobile experiment for Nike, leading to immediate revenue improvements in the millions.

Stitch Fix

Data Science Manager - Style Discovery

2019 - 2021

- Led a team of 6 ML Engineers and Data Scientists, fostering cross-functional collaborations with Engineering, Merchandise, Strategy, Product, and Algorithms organizations. Our team revolutionized a fundamental fashion paradigm by integrating client feedback on designs with historical purchasing behavior, enabling predictive modeling of client responses to garments before manufacturing, at scale. This recommender system now informs decisions on individual garments, guides vendor relationships, tests growth trajectories, and enhances inventory growth efficiency.

- Style Discovery contributed to the launch of the Elevate program, which utilized internal tools to assist emerging BIPOC designers in determining product market fit, planning supply chain volume, and optimizing B2C presentation.
- Supported cross-organizational alignment for measuring and setting growth trajectories, transitioning from current Share of Market to Total Addressable Market.

Wise.io, from GE Digital

Principal Data Scientist

2017 - 2019

- Led a collaboration of hundreds of people and a core ML team, across 7 time zones, launching machine learning for real-time airplane engine monitoring & diagnostics. Deployed to all commercial jet engines monitored by GE.
- Built key production ML components beating previously used state of the art.
- Mentored Power Plant monitoring & diagnostics initiatives inspired by aviation work.

University of California, Berkeley

Masters Program Lecturer in Applied Machine Learning

2018 - 2019

- Taught and mentored industry professionals on building ML products in their domains.

Pinterest

Data Scientist

2015 - 2017

- Created the Signal Program and Repository, a feature store used across the organization to design, evaluate, and experiment on adding new features into Ads, Growth, and Search production models. Program results were used and contributed to by 50+ machine learning engineers.

LinkedIn

Staff Data Scientist & Tech Lead

2013 - 2015

- Helped hire, onboard, and grow a team of 11 data scientists working on consumer analytics.
- Worked with Growth Team to systematically identify, scope and experimentally test data driven outreach campaigns. Hit or exceeded member growth targets for 8 quarters.
- Used social networks background in developing products, analysis, and prototypes focused on user engagement, viral content, and network health.

Yelp Inc

Search and Data Engineer

2012 - 2013

- Built data pipelines, metrics, and ran experiments for Search Ranking, and User Engagement
- Built Yelp's first Query Normalization, Human Eval of Search Results, and Personalized Search

Facebook Inc

Growth and Product Insights Intern

Summer 2011

- Analyzed acceleration and deceleration of user engagement with Facebook

Cornell University

Networks Research with Prof. John Hopcroft

2010-2012

- Researched and computed structure of communities in large networks. Studied evolution and flow of information between communities in social, collaborative, and similarity networks.

Head Teaching Assistant for Java and Discrete Math (600+ students & 27 TAs)

2011 - 2012

Lecturer for Functional Programming and Data Structures (2nd foundational course)

2010

University of California, Berkeley

Research Assistant with Prof. James Sethian for PDE research

2005-2007

Education

Cornell University*Ph.D. Applied Math, M.S. Applied Math, emph in Social Networks*

Ithaca, NY

2007 - 2012

University of California, Berkeley*B.Sc. Electrical Engineering and Computer Science, minor in Applied Math*

Berkeley, CA

2003 - 2007

Skills

Unique Signature: Developing ML Platforms in critical paths, including setting strategy, crafting architecture, and building teams.

Management: ML Strategy, Talent Development, Recruiting pipelines, Cross Functional Alignment

Prior Development: Python(advanced), Spark, Presto, Pig, Java, Hive, Hadoop, C, MPI, R

Network Analysis: Community Detection, Structure of large networks, Network Cascades

Numerical Analysis: Optimization, PDEs, Linear Algebra, Iterative and Non-Iterative Methods

Diverse background in Mathematics, Computer Science, and leadership facilitates the swift acquisition of new skills.

Selected Talks and Publications

MLConf - Speaker*The Uncanny Valley of ML*

2019

MLConf - Speaker*Counter Intuitive Machine Learning for the Industrial Internet of Things*

2017

Strata NY - Featured Speaker*Replication in Data Science*

2016

Strata San Jose - Featured Speaker*Economic Insights from the LinkedIn Network*

2015

PNAS - Author*Fast Marching Methods for the continuous Traveling Salesman Problem*

2007

Hobby Data Science Projects

Academic Relations [2015-current]: National Science Foundation and ARPA-E panels, UC Berkeley Extension Board and teaching classes for UC Berkeley School of Information's Master in Data Science program.

Emerging Speakers in Tech [2015-2017]: Created a supportive community for conference speakers.

Additional: Book reviews for O'Reilly Media and mentoring data scientists.