A curious, persistent, and articulate data-scientist & entrepreneur skilled in turning chaos into order, and coaxing insights from white noise through data science. Inspired to solve "big" problems that improve life for many people ... their health, happiness, wallets, and environment.

TECHNICAL PROFICIENCY: Python, Pandas, Scikit Learn, Numpy, Scipy, PostgreSQL, Supervised- and

Unsupervised Machine Learning, Natural Language Processing, PCA/ SVD, Keras, NLP, Neural Networks, Bayesian inference, Web scraping, AWS, Docker, GitHub, Apache Spark/ DataBricks/ Scala, clustering methods (kmeans, DB scan, LDA), Visualization (GGplot, Tableau, Matplotlib), GitHub

FUNCTIONAL EXPERTISE: Board and investor communications, quantitative analysis, M&A, FP&A,

recruiting and team building

DOMAIN EXPERTISE: Electric utilities and smart-grid management, cloud computing, renewable

energy, block-chain/distributed ledger technology

RELEVANT EXPERIENCE

CAMBRIAN.AI Berkeley, CA

Head of Data Science, Sept. 2019 - Present

Seed stage company to employ ML and bots to protect user data ownership and privacy. NLP projects: metadata extraction from unstructured text, unsupervised learning/topic modeling, classifying privacy policy legal contracts into distinct legal provisions. Eight patents filed.

GREENSPARC INC San Francisco, CA

Data Scientist & Co-founder, Apr 2014 – Present

ETL, data cleaning and PostgreSQL dbase construction; time-series ML & neural net modeling (ARIMA, SARIMAX, RNN) to deliver nation-wide, real-time energy markets data for operators of data center fleets. Greensparc deploys high-uptime, modular, ultra-low-latency cloud computing for 50 50-80% less energy cost, with realtime sustainability & carbon reporting+optimization.

INDEPENDENT PROJECTS San Francisco, CA

Staff Contributing Writer, Medium.com "Better Programming", June 2019 - Present

- Ames Iowa Real Estate Price Inference ... Python, Pandas, Scikit Learn, Statsmodel
- Subreddit Classification (Science fiction vs. Physics & Astronomy) ... Scikit Learn
- FEMA Early Disaster Condition Monitoring & Alerting ... AWS plus full stack above
- Calif. Electricity Price Prediction w/ Recurrent Neural Nets ... full stack above + Keras RNN

POWERCHOICE INC / GREENSPARC ENERGY ADVISORS

San Francisco, CA

Co-founding Partner & Quantitative Modeler, 2009 - 2014

Energy program consultancy that won and negotiated city of SF PUC's municipal energy program (CCA) to replace PG&E in SF... 20-yr, \$8 billion plan. Modeled the complete city's electricity tariff (pricing) structure for all residential and commercial customers, including rolling price forecast.

manu kalia

CROWNBUTTE WIND POWER INC

Bismarck, ND

Quantitative Analyst & CFO, 2007 – 2008

Built wind energy development models (based on tower anemometer data) for 600MW spread across 12 projects in Western ND and Eastern MT. Negotiated PPA with local utility MDU. Raised private capital, then wrote & issued S-1 SEC registration statement to list Crownbutte on OTC market. Merged with Nacel Energy Corp.

ARC INTERNATIONAL (VIRAGE LOGIC)

San Jose, CA

FP&A Director & Interim CFO, 2002 – 2006

Quant. models ownership for all G&A functions ... finance, M&A, investor relations, IT & HR. Includes models for: budgets, rev forecasts, variances, pricing, M&A, tax, xfer pricing, audit, & comp plans.

TRADEWORX INC New York, NY

CFO & Lead Business Analyst, 2001 – 2002

Quant analytics and web-based proprietary trading tools for individuals. Secured CNBC and the US SEC as customers. Transitioned to a proprietary quant ELSA hedge fund and high-frequency trader.

COMMONWEALTH ASSOCIATES

New York, NY

Networking & Telecom Deal Team Lead, 1999-2001

Evaluated over 2,000 small-cap/ micro-cap tech companies for possible PIPE investments. Screened down to two dozen due diligence candidates. Completed 6 deals for $^{\circ}$ \$100 million in financing.

SANFORD C. BERNSTEIN & CO (ALLIANCE CAPITAL)

New York, NY

Telecom Equip & Data Networking Equip Analyst, 1998 – 1999

Created market, revenue, and earnings models for publicly traded companies: Lucent, Cisco, Ascend, Bay Networks, Nortel, US Robotics/ 3Com, Alcatel, Ciena.

BELL LABORATORIES (AT&T → LUCENT TECHNOLOGIES)

Murray Hill, NJ

Quantitative Models Planning Manager, 1995 – 1998

Scenarios-based planning leader for \$5 billion+ project to extend bi-directional optical-fiber networks. Company wide leadership on implementation of Monitor's *scenario-based planning* discipline.

EDUCATION

TUCK SCHOOL OF BUSINESS ADMINISTRATION AT DARTMOUTH COLLEGE

Hanover, NH

MBA, General Management ... 1995

DARTMOUTH COLLEGE

Hanover, NH

A. B. cum laude, Engineering Sciences ... 1993

GENERAL ASSEMBLY

San Francisco, CA

Data Science Immersive Program, Spring 2019