

manukalia

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Portfolio ... <http://www.manukalia.net>

Articles ... <http://www.manukalia.net/blog>

Python code ... <http://www.github.com/manukalia>

LinkedIn ... <http://linkedin.com/in/manu-kalia-sf>

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, Neural Networks, Bayesian inference, Web scraping, AWS, Docker, GitHub, Apache Spark/ DataBricks/ Scala, clustering methods (k-means, 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

GENERAL ASSEMBLY San Francisco, CA

Data Science Immersive, Spring 2019

Project-based immersion program to gain professional-level skills in the entire data science workflow: data acquisition, data cleaning & EDA, modeling and statistical analysis, database management (cloud-based), visualization, and presentation.

Projects: Ames Iowa Real Estate Price Inference
Subreddit Classification (Science fiction vs. Physics & Astronomy)
FEMA Early Disaster Condition Monitoring & Alerting
California Electricity Price Prediction Using Recurrent Neural Nets

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. Back-tests show that our data science-based algorithm can deliver 20%+ annual energy cost savings while simultaneously increasing renewable energy consumption by 10% or more.

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. Designed and bid on multiple CCA and Port Authority RFPs.

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, revenue forecasts, variances, pricing, company combination scenarios, tax, transfer pricing, audit, compensation 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 ~\$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 to the home. Led cross-functional executive team through a futurist scenario construction, and fit a flexible strategy to extend fiber-to-the-neighborhood, and then on to the home-endpoint over time.

E D U C A T I O N

- GENERAL ASSEMBLY San Francisco, CA
Data Science Immersive Program, Spring 2019
- 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