m a n u   k a l i a

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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

R E L E V A N T   E X P E R I E N C E

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 project submitted for NSF grant for a bi-RNN to classify (unsupervised) legal clauses in any online privacy policy, and to classify (supervised learning) each clause by impact on user data privacy. Written several claims (as they pertain to data science) of provisional patent filing.

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.

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.

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 ~$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.

E D U C A T I O N

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