



Vivek Menon

DATA SCIENTIST · FINANCIAL RESEARCHER · TECHNICAL DIRECTOR

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Summary

Technical director with 8+ years of managing data teams & achieving high profit business outcomes. Passionate about artificial intelligence, scalable architecture, cross-team collaboration, & profit. Grew up across a mix of emerging markets, so no stranger to getting my hands dirty. Also a fan of fractals, quantitative finance, functional programming & cats.

DATA

Python (NumPy, Scikit-Learn, Pandas, Matplotlib, Seaborn, Keras, TensorFlow, Jupyter, PyTorch), R (tidyr, dplyr, ggplot2), Julia (IJulia, GladFly.jl), Matlab, C (llama.cpp, gperf), Big Data (PySpark, Hadoop, Redis, ETL), SQL (PostgreSQL, MySQL, CloudSQL), NoSQL (MongoDB, DynamoDB, DataStore),

DEVOPS

Google Cloud Platform (Compute, Cloud Functions, Cloud Run, PubSub, BigQuery), Amazon Web Services (EC2, Aurora, Redshift, Lambda, S3), Firebase (Functions, Firestore), Kubernetes (Docker, Shopify, Wordpress), Linux (Debian, Ubuntu, NixOS), Vagrant, CI/CD (TDD, Jenkins, CircleCI)

DEVELOPMENT

Python (Django, Flask, Requests, Coconut, Hy), TypeScript (NodeJS, Axios, Express, Lodash, Async.js, Request, PM2, Vue, REST/WebSocket API), Haskell (GHC, Stack), Shell (Bash, Zsh), CSS (Sass, Less), Git, HTML, Clojure (Aleph, Core.async), LaTeX, Markdown, Microsoft Excel (VBA), Vimsript, Elisp

Experience

Kinesso

Toronto, CA

SENIOR DIRECTOR, DATA STRATEGY

Feb 2020 - Present

Spearheaded KAS Toronto (Kinesso Audience Solution), managing a team of 4 FTEs to 8x revenue (\$77K → \$650K) in 2021, 2x revenue (\$650 K → \$1.7MM) in 2022 & \$1.4 YTD Q2 '23 across 30+ corporate clients, despite C19. Specialized in building and selling 3rd party (3PD) and 1st party (1PD) data products to clients & partners of the IPG Media holding group, including but not limited to Media Experts, Reprise, Universal Media, FCB, McCann, & Initiative.

- Created 500+ High Value Audiences (HVA) over 3 years, taking clients from ideation to deployment via SoWs, managed invoices, and specialized addendums for NA and APAC clients like Amazon (Rufus Retail, Video), LEGO Canada, Levi's, Sony Canada (Pictures, Music) & Nintendo Canada, yielding over \$100K+ MRR in adjoint media data spend.
- Established 11 case studies from scratch with clients like EQ3 and Hersheys, deploying High Value Audiences (HVAs), in partnership with Nielsen, Acxiom & Matterkind, demonstrating occasional 4x new-to-brand RoAS, 1.5x CTR, 10% reductions in open market CPMs across platforms like Google DV360, Tradedesk, Amazon Advertising, & Meta
- Led a skunkworks team to build and scale a Covid-19 response product to optimize ad outreach for clients post pandemic, including the Government of Canada; reaching near 70% adoption across all clients.
- Won part of the Johnson & Johnson business as part of the UM Thrive project, helping bringing over \$2MM in annual spend & beating Kinesso New York for client approval to use custom data products in NA
- Prototyping an inhouse AI attribution methodology for long term channelless optimization (Meta vs. Amazon vs. Google).

Lake Finance

Toronto, CA

FOUNDER & CTO

May 2018 - Nov. 2019

Exited a blockchain fintech startup with a mandate to engineer a practical set of financial tools for decentralized currencies; scaled to 11 person team and a \$1.6M USD valuation through bootstrapping, open-source grants and consulting.

- Raised \$100K at 6% (1.5MM valuation) from University of Toronto's inaugural Creative Destruction Lab (CDL) Blockchain-AI (BcAI) 18/19 incubator.
- Launched invite-only beta (\$120K over 200 users) of Lake Wealth, which provided AI-driven cryptocurrency portfolios hosted via cloud providers (Google Cloud Compute, Datastore, CloudSQL) & other asynchronous microservices to provide passive non-custodial investing.
- Wrote Hydra AI; a proprietary portfolio selection engine in Python 3 that searches via price momenta & genetic algorithms to hunt for alpha in extreme volatility (black swan) events, converging in multi-threaded $\mathcal{O}(n \log n)$, benchmarked with paper trades and live capital.
- Architected Lake Trade, an open source fault-tolerant Decentralized Exchange (dEX) allowing Ethereum users to trade ERC-20 / ERC-721 assets using the 0x V2 Protocol. Provided at cost & 0 fees for the Open-source community; raised \$100K grant from 0x Team to continue development in the blockchain and DeFi space.

Juniper Park \TBWA

Toronto, CA

STRATEGIC DATA SCIENTIST

Nov. 2016 - Apr. 2018

Led the Toronto division of the global TBWA Digital Arts Network (DAN) and Apple's Media Arts Lab (MAL) by providing multi-platform analytics, end-to-end data solutions, & bespoke measurement strategies.

- Built highly-available & scalable data pipelines across 3 zones in the TBWA Network to pitch & solve business problems for 10+ multinational clients, including NFL, Nissan, Pfizer & Apple.
- Supervised a \$2M Adobe Marketing Cloud stack for Capital Group / American Funds, optimizing analytics via human analysis and machine learning to convert investors & advisors and grow their \$1.3 Trillion AUM.
- Led a 3 person cross-departmental team in partnership with TBWA\CHIAT\DAY focused on discovering creative applications of AI, including experiments with artificially-generated creative content via TensorFlow Magenta.

Education

Udacity

NANODEGREE(S)

Mountain View, USA

September. 2017 - May. 2018

Member of some of the inaugural classes of the Nanodegree Program, as curated by Udacity, in partnership with IBM Watson, Amazon Alexa, Github, AT&T, OpenAI, & Google.

Apr. 2018 **Artificial Intelligence Nanodegree**, *sudokuAI, salesmanAI, nqueenAI, aslAI, pacmanAI, touristAI, faceAI, voiceAI*

Apr. 2018 **Web Development Nanodegree**, *linuxServer, itemCatalog, logAnalysis, movieTrailers, neighbourhoodMap*

Sep. 2017 **Deep Learning Nanodegree**, *introDL, cnnDL, rnnDL, lstmDL, qLearningDL, ganDL*

Sauder School of Business - University of British Columbia

Vancouver, CA

B. COMMERCE, DOUBLE MAJOR IN FINANCE & MARKETING WITH A MINOR IN ECONOMICS

September. 2010 - May. 2014

Graduated May '14 with a double specialization and minor with emphasis on financial engineering, marketing behavior, and independent research into multi-fractal analysis.

Research

Hydra AI: The Evolutionary Diversification Mechanism

Toronto, CA

AUTHOR

May 2018

A proposed solution to the *Offline Cardinality Constrained Multi Period Selection Problem*, as described via a patent-pending multi-agent adversarial solution that merges evolutionary strategies with probabilistic AI.

Bitcoin Pricing & Volatility: A Multifractal Analysis

Vancouver, CA

AUTHOR

Oct. 2013

Explored if cryptocurrencies exhibit fractal properties like over-dispersion, long memory and self-similarity, in partnership with the UBC Finance Department.

Certifications

BUSINESS

Sep. 2020 **CORE**, Harvard Business School Online

Cambridge, USA

Jun. 2018 **Artificial Intelligence: Implications for Business Strategy**, MIT Sloan Executive Education

Cambridge, USA

Nov. 2013 **Hootsuite Professional**, Hootsuite

Vancouver, CA

Sep. 2013 **Canadian Securities Course (CSC)**, Canadian Securities Institute

Toronto, CA

TECHNOLOGY

Aug. 2019 **Solutions Architect Associate**, Amazon Web Services

Toronto, CA

Aug. 2019 **Developer Associate**, Amazon Web Services

Toronto, CA

Aug. 2019 **SysOps Administrator Associate**, Amazon Web Services

Toronto, CA

Nov. 2014 **Web Analytics**, Google

Toronto, CA

