MATTHEW SPENCER

<u>matt@mattspencer.net</u> - +64 022 071 3499 – Wellington, NZ Linkedin: <u>mmspencer</u> - Github: <u>mateospencer</u> NZ Resident & US Citizen

ANALYTICS DIRECTOR & DATA SCIENTIST

Experienced at advancing organisations towards data-driven solutions to address complex business needs.

PROFESSIONAL HIGHLIGHTS

- Founded a organisation with corporate and academic partners to deliver analytic solutions to non-profits, state and local governments.
- Helped deliver the FBI's first open-source data product (<u>Crime Data Explorer</u>).
- Passed FBI's Special Agent Exam
- Consulted for a Google Founder's startup to expand its technical/analytical capabilities and set the strategy for data and tech.
- Co-created cvxTrain R package and researched the application of convex clustering within vast medical records systems
- Built a Fortune 500 technical team from scratch and saved company \$2.3m NZD

CAREER OVERVIEW

Ara Poutama Aotearoa/NZ Dept of Corrections May 2020 - PRESENT

Director, Health Insights & Analytics

Built and lead a team of analysts to establish data solutions to inform healthcare delivery, improve health equity and outcomes for Māori, and advance pae ora.

LEIDOS Nov 2018 – May 2020

Lead Data Scientist and Solution Architect

Created commercial healthcare analytics and engineering team. Machine learn ing/clustering solutions using R, entity resolution research and development, and data engineering via PySpark/Hadoop for healthcare applications.

DATA DRIVEN WV Sep 2017 - PRESENT

Original Founder, Board Member, Data Scientist,

Founded analytics org to help non-profits, small biz, and local governments with tech projects and data analysis. Secured funding, corporate sponsors, University partnership, and full time project staff and administration.

FBI Oct 2015 – Nov 2018

Enterprise and Solutions Architect, IT Roadmap Lead

Implemented first open crime data visualisation for the FBI. Created Bureau's first internal open source community. Worked within background check and crime data reporting systems. Also provided Database administration.

ADDITIONAL EXPERIENCE

NANTUCKET DATA PLATFORM July 2018 - Oct 2018 Data Manager and Consulting Data Scientist

WEST VIRGINIA UNIVERSITY Oct 2014 - Nov 2015 Business Analyst, Lead for Enterprise Reporting

STATE OF WISCONSIN Mar 2012 - Aug 2014 Department of Justice – Applications Architect/Technical Architect

EPIC (Electronic Health Record software provider) Jun 2011 - Ma 2012 Epic Client Systems Manager - PC Systems

MYLAN (Generic Pharma) Aug 2009 - May 2011 SharePoint Architect, Messaging/Enterprise Content Management Administrator

EDUCATION

WEST VIRGINIA UNIVERSITY

M.S. Business Data Analytics (2017-2018) Top of class and top 10% of all graduating classes, Honour Society of Phi Kappa Phi Dissertation/Capstone Research: 'Convex Clustering and Multi-View Learning on Clinical Data for Improved ACO Quality Measure Tracking.' Co-created convex clustering package (cvxTrain) for R.

Skills/Classes/Research involving: R, Simple and Multi Linear Regression, Machine Learning, Model Evaluation, Stat Computing, Data Mining, Predictive Modelling, Spark, SQL, Regularization, Maximum Likelihood Estimation, Convex Clustering, Shiny, Tableau

Bachelor of Arts (2009) Self-designed degree regarding Architectural Design, minor in Native American Studies

VOLUNTEER PROJECTS.

Google.org 2019

Reviewer for AI and Machine Learning (DataKind) Helped Google.org select the most promising proposals submitted to the Google AI Impact Challenge.

The Good Judgment Project 2014-2015

Forecaster

Analyst predicting world changing events via aggregative contingent estimation against 17 agencies in the US intelligence community. Member of small team to hash out consensus judgments regarding geopolitics.