**SUMMARY**

Data Scientist with 15 years of experience in financial services and investment management research.

**TECHNICAL SKILLS**

Python (Pandas, Numpy, Sci-Kit Learn, MatPlotLib, et al), SQL, MongoDB, Big Data tools (Spark, AWS, Hadoop / MapReduce), Linear & Logistic Regression, decision Trees & Random Forests, k-Nearest Neighbors, Support Vector Machines, Neural Networks, k-Means Clustering, Hierarchical Clustering, PCA, Natural Language Processing (TF-IDF, Topic Modeling, Cosine Similarity), VB.net, MS Excel (macros & VBA), MS Access.

**EDUCATION & CERTIFICATIONS**

* **Data Science Immersive**. Galvanize, March 2017.
* **Master of Science in Finance.** The George Washington University, May 2000.
* **Bachelor of Science in Economics.** Texas Christian University, December 1996.
* Chartered Alternative Investment Analyst (CAIA) charterholder, Nov 2007.
* Chartered Financial Analyst (CFA) charterholder, May 2003.
* Registered Investment Advisor (RIA) Representative (NASD/FINRA Series 65), June 2001 – Feb 2008.

**EXPERIENCE**

**Dimensional Fund Advisors (Austin, TX) April 2007 – February 2016.**

Associate, Investment Analytics & Data, Research Department, January 2012 – February 2016.

Performance Analyst, Communications Department, April 2007 – December 2011.

* Fulfilled all data needs for the Communications department, including presentation materials for the US, Canada, UK, Europe, Australia, and Japan, the Matrix Book (annual flagship publication), mutual fund performance pages, AUM reporting, and website charts and graphs.
* Supported data needs for the Financial Advisor Services and Institutional Services departments, including development of portfolio design and analytics spreadsheet tools used by financial advisor clients in the US, Canada, and UK.
* Co-managed data vendor relations (Morningstar, Lipper, Bloomberg) to ensure accuracy of DFA fund data, as well as new fund activations, and monthly performance and fixed income surveys.
* Provided performance data to Accounting & Legal departments for US Annual Reports, US Prospectus updates, and Canadian Annual & Semi-Annual Reports.

**McCaffrey Investment Consulting (Santa Barbara, CA) February 2006 - April 2007.**

* Portfolio analysis for high-net-worth investors, portfolio design, Investment manager due diligence.

**Mercer Advisors (Santa Barbara, CA) September 2000 - February 2006.**

Senior Investment Analyst

* Investment Committee member; second-in-charge of $2.9 billion investment program.
* Involved in design and implementation of investment strategy, including client portfolio construction, external manager search, selection, and monitoring, tax-management, and rebalance strategy.
* Developed risk tolerance questionnaire and scoring algorithm to match clients with appropriate model portfolios.
* Analysis of high-net-worth prospective client portfolios, including recommendations for improvements.

**PROJECTS**

* “[Analysis of NFL Play-by-Play Data](https://github.com/MMcCaffrey/GalvanizeCapstone),” Galvanize Capstone, March 2017.

**PUBLICATIONS**

* “[An Introduction to Swaps](http://www.investopedia.com/articles/optioninvestor/07/swaps.asp),” Investopedia.com, April 2007.