Ryan Bieber

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Summary

# Data Scientist with a M.S. in Econometrics with 4 years work experience(2 years professional data science experience and 2 years quantative research) utilizing classification, regression, deep learning, and clustering techniques. Experienced at using R, and Python to build, model, and deploy modelling applications onto Kubernetes.

# Skills

**Technology:** Kubernetes, AWS, Docker, Openshift, IBM Cloud,R, Python, MySQL, DB2, PostgreSQL, Cognos, HTML/CSS/JS, R-Shiny, Plumber, Django, Keras, Jenkins, and Spark.

**Data Toolbox:** Deep learning, time-series, data mining, visualization, regression, ensembling, machine learning, ETL, Rest API’s, cloud deployment, CI/CD, web applications and NLP.

# Experience

IBM, Data Science & Technology, Finance. Rochester, MN. 07/2019 – Present  
**Data Scientist**

* Created a time series modelling application (ARIMA, exponential smoothing, dynamic linear modelling, etc.) using R inside a docker image that is able to forecast, in parallel, any series given to it through a series of back-testing and error minimization algorithms to produce the most accurate forecast possible with the given data in a repeatable format.
* Pushed for using software best practices with a CI/CD(Jenkins) framework to automate builds and to minimize deployment time. This allowed for faster turnover of models and for a more hands-off build approach.
* Technical lead of my squad of 7 people in using data science fundamentals of programming with Python, R, and SQL. Along with statistical fundamentals of regression techniques(random forest, glm, ols), machine learning(KNN, clustering, neural nets, etc.), and time-series techniques(ARIMA, exponential smoothing, tbats, etc.).
* Independently created a REST API in R that was housed in a kubernetes cluster using docker and webhooks. Utilizing Trello’s API we have improved process management for over 10,000+ people by tracking their tasks every day and being able to visual those inside a dashboard.
* Worked with cross-functional teams across finance in an agile fashion to develop, implement, and deploy models to standardize financial forecasting across IBM finance.

University of North Dakota, Economics Department. Grand Forks, ND. 05/2017 – 05/2019  
**Graduate Research Assistant**

* Tutored undergraduate students and MBA’s for 2 years in statistical methodologies along with basic economic principles.
* Preformed research on many different topics such as banking, financial econometrics, housing prices, and the impact of the great recession on college enrollment. Utilized econometric methods such as Elastic Net, GLM, and VAR.
* Built complex data sets utilizing a variety data sources (html, json, csv, databases, etc.)

InfoTech, Consulting. Gainesville, FL. 05/2018 – 08/2018  
**Consulting Internship**

* Worked with PhD consultants in class action lawsuits to help prove if collusion was evident by using SAS and regression techniques to show a “but-for” price and the actual price with the difference being the amount gained by collusion.
* Applied inferential statistics and cluster analysis inside SAS and gathered key insights for our economic litigation team to look into more deeply into the data for multiple cases.

Mayo Clinic, Advanced Image Research. Rochester, MN. 05/2015 – 08/2015  
**Research Fellowship**

* Analyzed 3d image scans of livers, hearts, and kidneys inside Matlab. The data was then sent through a series of ordinary differential equations(ODE’s) to determine the stiffness of the body parts.
* Researched the effect of passing waves through a plate of varying thicknesses to simulate the wall of the heart to determine if it is possible to measure heart stiffness without going through an invasive process. (See [Lamb Waves](https://en.wikipedia.org/wiki/Lamb_waves))

# Education

University of North Dakota. Grand Forks, ND. 2017 – 2019  
[**Masters in Science,**](http://rankings.ft.com/businessschoolrankings/masters-in-finance-pre-experience-2017) **Applied Economics** GPA 4.0  
University of North Dakota. Grand Forks, ND. 2013 – 2017  
**Bachelors of Arts, Economics & Bachelors of Science, Mathematics** GPA 3.65

# Awards

IBM F&O Recognition 09/2020 – In recognition in supporting IBM and Finance and Operations strategic priorities.

IBM Special Equity Award 05/2020 – For the continuing display of leadership and pursuit of knowledge above and beyond what is expected.

# References

Available on Request