# Enrique Emanuel Rodriguez

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## **PROFILE SUMMARY**

Apply Statistical, Machine Learning, and Visualization methods to discover interactions and behaviors in data in order to provide both insightful, innovative solutions and data products.

## **TECHNICAL SKILLS**

Primary Languages: Python, R Knowledge of: C, Scala, Spark

Scientific Packages & Libraries: R: ggplot2, dplyr, Rmarkdown, Caret, H2o Python: numpy, pandas,

sklearn, matplotlib, H2o

Machine Learning Algorithms: K-NN, Decision Trees, Random Forest, Support Vector Machines,

Gradient Boosted Machines, Generalized Linear Models.

**Databases:** MySQL, PostgreSQL, SQLite

Tools: Git/Github, Rstudio, Jupyter Notebooks

Other: Linux (Ubuntu/Debian, Fedora/CentOS, Arch), Bash

#### **EDUCATION**

# California State Univ. East Bay, Hayward, Ca

Sept 2014 - June 2016

Master of Science, Statistics

- Relevant Courses: Applied Linear Regression, Statistical/Machine Learning, Time Series, ANOVA, Mathematical Statistics, Probability Theory, Stochastic Processes, Probabilistic Simulation, Data Visualization
- Languages and Tools: R, Python, Jupyter, Tableu
- Overall GPA: 3.8

# California State Univ. Sacramento, Sacramento, Ca

Sept 2011 - Dec 2013

Bachelor of Arts. Mathematics

- Relevant Courses: Real Analysis, Linear Algebra, Differential Equations
- Languages and Tools: R, Octave(Matlab)

# PROJECTS AND PRESENTATIONS

# Recent Projects

- "United States Single Family Home Sales: A Time Series Analysis" Individual project that analyzes single family home sales in the United State from 1975 to 1995. Implemented Seasonal ARIMA to model and eventually forecast home sales.[link]
- "Yet Another Airline Analysis: A Two Class GBM Implementation": A three person project in which an analysis of airline on-time performance was performed. Implemented KNN and Gradient Boosted Machines to predict airline delays. [link]

## Presentations

- "R Bootcamp: An Introduction to Statistical Computing in the R Programming Language": Presentation given to an audience of +40 students from different departments. Introduced R as a statistical tool for wrangling, exploring and modeling data. [link]
- "Model Building and Validation with Caret": An introduction to model building with advanced methods such as, Tuning Parameter Grid Search, Resampling Methods and validation visualizations. [link]
- "An Introduction to Mapreduce: KNN in MapReduce": An introduction to the map reduce paradigm and Hadoop computing environment. Implemented KNN using a Map-reduce paradigm.

## **EXPERIENCE**

## **CSUEB Data Science Club**

Sept 2015- Jun 2016

Co-founder, Lead Content Creator and Web Developer

Hayward, CA

- Worked with other student administrators to plan and help create content to be presented in bi-weekly meetings. Under the advisement of Dr. Suess.
- Prepared pretensions, articles and source code to be used by students. Topics included: Intro to R, Intro Mapreduce, Advanced Modeling in R.
- Used static website engine **Jekyll** and **Ruby on Rails** to create the CSU East Bay Data Science Club Website [csuebds.com]. Designed to host and advertise content provided by the club.
- Recruited professionals in the Data Science field to speak at meetings.

Tierra Mia Coffee

Mar 2014 - Nov 2014

San Francisco, CA

Store Manager

- Managed a team of 6 store employees in a very fast paced environment
- Analyzed daily store sales and activity to plan for both scheduling arrangements and store item stocks.
- Managed baking and bill payments for the San Francisco branch of the chain.
- Interviewed candidates and trained new employees