

Education

University of California, Santa Barbara

B.S. in Statistical Data Science B.A. in History

Completed in 2019

Division 1-A Men's Rugby Team

- Relevant Courses: Data Engineering, Linear Regression, Econometrics, Machine Learning, Time Series, Advanced Statistical Modeling, Design of Experiments, Sampling Techniques, and Financial Analysis.
- Applied quantitative mathematical skills with in-depth qualitative studies in a varied and wide-ranging set of history courses.
- Committed approximately 30 hours per week to training, meetings, film study, travel, and competitions while maintaining full course load.

Moorpark College

A.S. in Mathematics Completed in 2016

- Relevant Courses: Calculus, Linear Algebra, Macro- and Micro-economics.
- o Information Technology Services Officer for Moorpark College Business Club from August 2014 to May 2015.
- Supervised Moorpark College's Business Exposition and coordinated 21 local businesses' presentation at the event.

Experience

ATTENTIVE THERAPEUTICS, INC

Intern

January 2013 – June 2014

• Supported development of a double-blind scientific study to obtain FDA approval for a clinical treatment.

Medical Data Analyst June 2014 – May 2015

- Supported the data gathering of the double-blind study.
- Organized and collected the data in Excel and SQL.
- Assisted with the statistical analysis of the study's results in Excel and R.

Academic Projects

Behavioral Modeling:

- Built a mathematical prediction of the 2012 Presidential Election based on polling and demographic data based on Nate Silver's analysis.
- Used a suite of different R packages including tidyverse, ggplot, and plyr to construct a precise, supervised machine learning model based on a hierarchical scheme.

Time Series Analysis:

- Performed box-cox transformations alongside detrending and deseasonalation techniques to clean up and reformat an agricultural dataset.
- Constructed a SARIMA (Seasonal Autoregressive Integrated Moving Average) model with AICc and BIC metrics on top of the data and verified via Shapiro-Wilk and Ljung-Box tests for randomness.
- Used the generated time-series model to project and predict future milk output.
- Used R with packages including tseries and qpcR to generate and perform predictions with the model.

Survival Analysis of Large-Bowel Carcinoma Treatments:

- Evaluated two options for treatment of a malignant rectal cancer against a control.
- Used Kaplan-Meier estimators to quantify occurrence of symptoms followed by exhaustive multiple regressions. Verified model using techniques including normality and residual plots.
- Technologies leveraged include R packages such as survival and KMsurv.

Skills

Programming Languages: Proficient with Excel and experienced with R, MATLAB, SQL, Python, and SAS.