Calvin Floyd

www.calvinfloyd.com | Sacramento, CA

PROFESSIONAL EXPERIENCE

Sacramento Kings, Senior Data Scientist - *Sacramento, CA* ***July 2021 - Present***

- Managed multiple ETLs to ensure data from providers came in as accurate and as soon as possible
- Enforced R package version control to ensure consistent and up-to-date working environments across the department
- Solidified testing and data validation systems to identify bugs in our code / data as soon as possible
- Constructed ID mapping system to address the common problem of linking various IDs from multiple sources together
- Constantly consolidated and trimmed code in repository in an attempt to keep operation lean and manageable

Sacramento Kings, Basketball Operations Analyst - *Sacramento, CA* ***November 2018 - July 2021***

- Supervised multiple interns and their various projects ranging from research to ETL related processes
- Built and managed player projection systems involving overall performance, individual skills and market value
- Supported and maintained daily PDF report creation including pre-game, post-game and player reports

Sacramento Kings, Analytics Intern - *Sacramento, CA* ***August 2017 - February 2018***

- Assisted in the creation of team database consisting of over 300+ tables, utilizing R and PostgreSQL
- Built Shiny-based applications which provided the front office with information on player development
- Created data visualizations with ggplot and plotly, including hexagon-based shot charts and game-flow visualizations

Bankers Healthcare Group (BHG), Marketing Analyst - *Syracuse, NY* ***April 2018 - November 2018***

- Built regression models to help predict which customers would be most profitable to market to, using R
- Utilized Microsoft SQL to perform a majority of the data manipulation, combining hundreds of tables together

United States Tennis Association, Data Analyst Intern - *Flushing, NY* ***Summer 2016***

- Analyzed large amounts of spatio-temporal player-tracking data using Python (pandas) and MySQL
- Incorporated regression and decision trees to develop predictive models of the outcomes of individual tennis points

EDUCATION

Rochester Institute of Technology - ***M.S. Applied and Computational Mathematics*** ***2015 - 2017***

State University of New York at Geneseo - ***B.A. Mathematics*** ***2011 - 2015***

TECHNICAL SKILLS

• R **• SQL** **• AWS** **• git / GitHub** **• Python** **• Linux** **• docker**

⟶ Shiny - tidyverse ⟶ PostgreSQL ⟶ S3 - EC2 - RDS

PUBLICATIONS

grobblR, Comprehensive R Archive Network (CRAN) ***September 2021***

- R package aimed at producing PDF reports with various graphics easily in the R environment
- Uses a Shiny bootstrap-like grid system to combine objects together in the most flexible and intuitive way possible
- Utilized object oriented programming in order to make the rows and columns of the page well integrated

Shot-by-Shot Stochastic Modeling of Individual Tennis Points, JQAS ***October 2019***

- Paper using multi-resolution stochastic modeling to predict the win probability at each shot during a point
- Evaluated the evolution of individual points every 25^{th} of a second for each player in the match
- Analyzed spatio-temporal tracking data using Python and R, specifically looking at players' locations and tendencies

AWARDS

Best Young Researchers' Award – 1^{st} Place, UP-STAT 2017 Conference ***April 2017***

- Annual Conference of the Upstate Chapters of the American Statistical Association
- Application Category - Excellent oral presentation by a student of a compelling application of statistics or data science

RELATED COURSEWORK

Predictive Analytics, Rochester Institute of Technology ***Spring 2016***

Principles of Statistical Data Mining, Rochester Institute of Technology ***Fall 2016***

Numerical Linear Algebra, Rochester Institute of Technology ***Spring 2016***

LEADERSHIP AND OTHER ACTIVITIES

Men's Varsity Basketball Team, SUNY Geneseo ***2013 – 2014***