

Andrew Rall

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EDUCATION

University of California-Berkeley

B.A. in Statistics with Applied Cluster in Computer Science, May 2020

- Coursework: **Stat 133** (Concepts in Computing with Data), **Stat 134** (Concepts of Probability), **Stat 135** (Concepts of Statistics), **Stat 151a** (Linear Modeling: Theory and Applications), **Stat 154** (Modern Statistical Prediction and Machine Learning), **Stat 159** (Reproducible and Collaborative Statistical Data Science), **CS 61a** (The Structure and Interpretation of Computer Programs), **CS 61b** (Data Structures), **CS 188** (Introduction to Artificial Intelligence), **Data 100** (Principles & Techniques of Data Science)
- Extracurriculars: Director of Statistics Undergraduate Student Association (**SUSA**) Education Committee, Sports Analytics Group at Berkeley (**SAGB**) Projects Team Member, California Triathlon Team

EXPERIENCE

Project Manager, Live Sports Betting Project

SAGB

Spring 2019 - present

- Currently focused on using a combination of various APIs and web scrapers to assemble dataset of how in-game Moneylines change for any given NBA game
- Future goal of using game context and win probability to identify favorable live bets and changes to the Moneyline

Data Science Lecture Series

SUSA

Fall 2018 - present

- Helped create, organize, and present lecture material on topics ranging from NumPy to Neural Networks
- Lectures are given on a weekly basis to the 30+ members of the SUSA Career Exploration Committee
- Authored lecture on Tidyverse and turned it into a Shiny application that can be interacted with remotely

Cal Football Consulting Project

SAGB

Fall 2018 – Spring 2019

- Worked with team to create match-up specific 4th Down decision-making model for the Cal Football coaches to reference in-game
- Built web scrapers to collect data from ESPN
- Wrote an algorithm to identify the n most similar offenses/defenses over the past k years given a certain opponent; addressed issue of not having enough consistent data for any single College Football team
- Used filtered historical data to adjust Expect Point Values used by model

Lab Assistant

Data 8 Course Staff

Summer 2018 – Fall 2018

- Helped manage and teach class of 30+ students in an introductory data science course
- Provided one-on-one assistance for coding errors and conceptual misunderstandings

Research Intern, Massachusetts General Hospital (MGH)

Division of Gastroenterology (GI)

Summer 2017

- Facilitated a data collection platform for a study conducted by the Clinical Chief of GI at MGH on Familial Adenomatous Polyposis (FAP)
- Filtered and extracted patient information relevant to the study based on certain indicators

Enzymatic Protein Research

NDM-1 (New Delhi Metallo-beta-lactamase 1)

Winter 2016 – Spring 2017

- Researched the emergence and spread of the superbug NDM-1
- Participated in poster competition at Milwaukee School of Engineering and presented at Marshfield Clinic Research Foundation

SKILLS

- Languages: Python, R (R Studio), Java, SQL, and HTML/CSS
- Statistical Methods: Bayesian Analysis, Hypothesis Testing, Linear Modeling, Machine Learning, Parameter Estimation,
- AWS, Git, IntelliJ IDEA, Jupyter, Latex, PyCharm, Ray, R Shiny, scikit-learn, Spark, Tensorflow