

Andrew Rall

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To view public projects and read more about skills and experiences visit andrewr0498.github.io

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 159 (Reproducible and Collaborative Statistical Data Science), CS 61a (The Structure and Interpretation of Computer Programs), CS 61b (Data Structures), Data 100 (Principles & Techniques of Data Science)
- Extracurriculars: Sports Analytics Group at Berkeley (SAGB) Projects Team Member, Statistics Undergraduate Student Association (SUSA) Education Committee Member, California Triathlon Team

EXPERIENCE

Cal Football Consulting Project

SAGB

Fall 2018 – present

- Working with team of students 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 Football Outsiders and other sports sites
- 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.
- Created heatmaps of 4th Down decisions and conversion rates for teams over the past 17 years

Tidyverse Lecture

SUSA

Fall 2018

- Created lecture material on tidyverse, a collection of R packages designed for data science
- Presented material to class of 30+ students
- Turned lecture material into Shiny application that can be interacted with remotely

Lab Assistant

Data 8 Course Staff

Summer 2018 – present

- Help manage and teach class of 30+ students in an introductory data science course
- Provide 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 2016

- Researched the emergence and spread of the superbug NDM-1
- Participated in poster competition at the Milwaukee School of Engineering and presented research at the 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, Reproducibility
- Other: Git, R Shiny, IntelliJ IDEA, Jupyter, Latex, Regex