

JUSTIN LIU

<https://hillfields.github.io> | justintl原因@ucsb.edu | <https://github.com/hillfields>

EDUCATION

University of California, Santa Barbara

Sep. 2020 – Present

B.S. in Statistics and Data Science

Santa Barbara, CA

- **Minor:** Linguistics (Emphasis in Speech and Language Technologies)
- **Awards:** Dean's Honors (all quarters, GPA: 3.97/4.00), Creative Computing Scholarship (3x)
- **Relevant Coursework:** Data Science Principles (R & SQLite), Statistical Machine Learning, Regression Analysis, Intermediate Python, Data Science Capstone, Time Series

EXPERIENCE

Undergraduate Learning Assistant

Sep. 2022 – Present

UCSB Statistics & Computer Science Departments

Santa Barbara, CA

- Hold weekly office hours for 300+ students across 2 classes: PSTAT 10 (introduction to R & SQL) and CMPSC 5A (data science in Python for non-majors)
- Provide one-on-one assistance with coding and troubleshooting during lectures and sections
- Ensure that assignments are error-free prior to distribution and grade students' submissions as needed
- Monitor class discussion forums and answer questions about course logistics and material in a timely manner

Undergraduate Research Assistant

Jan. 2022 – Aug. 2022

UCSB Education Department

Santa Barbara, CA

- Assisted PhD student's research on the effects of participative music experiences on the sense of belonging and persistence of California transfer students
- Inputted data into a spreadsheet containing music faculty information from 100+ community colleges
- Developed pilot surveys in Qualtrics and made suggestions to increase the retention of participants
- Transcribed and edited interviews about transfer students' experiences regarding college and music

Notetaker

Sep. 2021 – Mar. 2022

UCSB Disabled Students Program

Santa Barbara, CA

- Summarized lecture content/announcements and highlighted key information for students with disabilities
- Uploaded notes within 24 hours of lecture for convenient reference on assignments

AVID Tutor

Aug. 2018 – June 2019

Rowland High School

Rowland Heights, CA

- Organized a discussion group for algebra and geometry students twice a week
- Mentored students on writing reflections and identifying areas of weakness in class material

PROJECTS

Clustering Analysis on Country Data | R (tidyverse, ggplot2)

- Implemented unsupervised clustering methods to group countries based on socioeconomic and health conditions

Modeling Japan's Activity Rates in the 21st Century | R

- Modeled and forecasted monthly activity rates in Japan for the years 2000-2021 using time series data

Analyzing the 2020 Presidential Election | R (tidyverse, ggplot2)

- Explored the relationship between census data and the 2020 election results with plots and maps
- Experimented with several classification models to predict the winning candidate for each county

Lyrics Frequency Visualizer | Python (BeautifulSoup, re, pandas, matplotlib)

- Scraped song lyrics from websites with BeautifulSoup and regular expressions
- Made a simple app to visualize word frequencies with Pandas (for storing song info) and Matplotlib

Art Programming Portfolio | Java, Processing, HTML/CSS

- Created interactive art pieces using the graphics library Processing in Java
- Designed the website to host the projects from scratch using HTML and CSS

TECHNICAL SKILLS

Languages: R (tidyverse), Python (NumPy, Pandas, Matplotlib), SQLite, LaTeX

Developer Tools: RStudio, Jupyter (Lab, Notebook), Git/GitHub, Visual Studio Code

Other: Qualtrics, Google Suite, Microsoft Office, Slack