Adam Sabra

asabra.com

www.github.com/theadamsabra
aasabra@ucdavis.edu
+1-951-201-4550

Experience

- **University of California, Davis** — Davis, CA
  Undergraduate Researcher; Statistics Department — *May 2020 - Present*
  - **Research Lead**: Managed every aspect of the research project from data collection, model building, and cloud management.
  - **Music Information Retrieval**: Used Librosa for audio transformations within the time and frequency domains such as Fast Fourier Transformations, Log-frequency power spectrograms, and Mel Frequency Cepstrum Coefficients (MFCCs.)
  - **Deep Learning Research**: Reconstructed Deep U-Net for Vocal Extraction in TensorFlow. Currently reading other papers that perform similar tasks for model comparison.
  - **Cloud Management**: Utilized Google Cloud Platform (GCP) for training, testing, and serving of models alongside buckets for data storage and management.
- **Mathnasium** — Davis, CA
  Mathematics Tutor — *September 2019 - Present*
  - **Improved Scores**: Worked one-on-one with children diagnosed with ADHD and Autism to help improve homework and test scores.
  - **Tutoring**: Tutored Math part-time at every academic level ranging from Kindergarten to AP AB/BC Calculus.
  - **Learning**: Refined teaching methods over time to allow for students' maximized retention given their various learning habits.
- **Hindsight Technology Solutions** — Remote
  Machine Learning Intern — *August 2019 - February 2020*
  - **Web Scraping**: Created large-scale web scrapers to retrieve a minimum of 500 articles at a time.
  - **Data Cleaning**: Parsed and cleaned through corpus data to retrieve key words/entities of each document.
  - **Web Apps**: Developed a web application using streamlit as an extension of a Natural Language Processing (NLP) model to facilitate semi-supervised training.
- **Penji** — Remote
  Data Science Intern — *January 2019 - August 2019*
  - **Marketing Analysis**: Studied KPIs with CEO to analyze marketing results - improved marketing strategies by 20%
  - **Data Dashboards**: Automated tracking of app's virality across campuses in Jupyter notebooks.

Projects

- **Audio Classifier**: Blended digital signal processing and supervised machine learning techniques to predict instruments with an accuracy of 98%.
- **Personal Portfolio**: Built and deployed a static personal website using Hugo, Markdown, and Netlify.

Relevant Courses

- **Supervised/Unsupervised Statistical Learning**: Two series class that focused on numerous methods of regression, classification, clustering, dimension reduction, and other modes of statistical learning adjunct with implementation of algorithms using sklearn.
- **Statistical Data Science/Big Data Technologies**: Three series class in which students learn about data analysis and model building utilizing the tools in R, Python, and SQL.
- **Probability Theory/Mathematical Statistics**: Three series classes which began with an introduction to the rules of probability and developed towards parameter estimation and hypothesis testing using mathematical statistics.
- **Bayesian Data Analysis**: Developed intuition on the properties of multi-dimensional prior and posterior distributions as well as various random sampling methods.

Education

- **University of California, Davis** — Davis, CA
  Bachelor of Science in Statistics - Machine Learning Track; GPA: 3.15 — *Sep. 2017 - June 2021*