## Cristobal Zamorano Astudillo

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#### EDUCATION

#### • University of California, Berkeley

Berkeley, CA

B.A. of Computer Science and Data Science

Expected Graduation: Spring, 2021

• Major Coursework: Machine Learning, Data Mining and Analytics, Probability & Discrete Mathematics, Databases, Data Structures, Advanced Algorithms

### • Santa Monica College

Los Angeles, CA

A.A/A.S. of General Science, Computer Science. Transfer requirements for Computer Science Aug. 2015 – Aug. 2018

o Dean's List, NSF Community College Scholarship

### EXPERIENCE

# • Board of Directors of a Non-profit Organization

Jan 2016 - August 2018

University Cooperative Housing Association (UCHA)

Los Angeles, CA

- Vice-president of the Board of Directors: Make policy and oversee the long-term UCHA's stability financially and politically. In addition, I also made weekly and quarterly financial reports of UCHA, I was responsible for the maintenance of the official files, including minutes of the Board. As Vice-president, I had to oversee and lead the overall condition of the non-profit organization along with the Executive Director and the rest of the Board members.
- Bruins-In-Genomics (B.I.G.) Summer Undergraduate Researcher University of California, Los Angeles

June 2018 - August 2018

Los Angeles, CA

• Undergraduate Summer Research Intern: Summer Internship that combined bioinformatics and genomics. Assist with research including analyzing multiple-phenotype data using QIIME2 via command line to study gut bacteria in mice. Analyzed data sets for diseases using Python to create a database of drug interactions. Data gathering & literature research on gene-mapping analysis data visualization using Seaborn to create figures for academic papers.

### Projects

- Toxic Comments Detector App Multilabel Classifier (Full Stack App, Machine Learning, NLP)
  - Goal: Detect toxic comments in a multi-label fashion in order to reduce the inadvertent bias of the model.
  - Dataset obtained from a Kaggle Competition. Data is composed of a large number of Wikipedia comments which
    have been labeled by human raters for toxic behavior.
  - o Click to Web App Link Click to Code Repo
- Future Salary App

(Deep Learning, Full Stack App, Machine Learning, NLP)

- Goal: Predict salary of a job given only the description/summary of a job.
- Data obtained from over 20,000+ jobs from over 20 cities in the United States.
- Full stack project that predicts Data related Jobs' salaries in a multi-class fashion. Each class it is a salary range.
- o Click to Web App Link Click to Code Repo
- Spotify Projects

(APIs, Python, Machine Learning, Software Engineering)

- **PCA Construction**: Using my one-year Streaming History of songs as data, I constructed my own interactive PCA in terms of Spotify's metric features and liked songs. Click here to see interactive PCA
- JSON to API to CSV: After requesting JSON file from Spotify's website, you can process every song through my code and obtain its Spotify's unique metrics.

#### SKILLS

- Programming Languages: Python (numpy, Jupyter/iPython, Pandas, Scikit-Learn, Tensorflow, Keras, GeoPandas, Seaborn, Plotly, Matplotlib, Flask), Java (Swing/JavaFX), SQL, HTML, CSS (Bootstrap 4), Javascript
- Data Science & Miscellaneous: A/B Testing, ETL, Data Science Pipeline (cleaning, wrangling, visualization, modeling, interpretation), Statistics, Time Series, Regression (Linear, Multiple-Linear, Random Forest, SGD), Classification (K-NN, SVM Families, Random Forest, Logistic), Clustering (K-Means, Spectral), Deep Learning (Monte Carlo Simulation, Convolutional Neural Networks) Git, NLTK, Heroku, LATEX, Spanish (Native)