Minger Lin

(1)510-935-5038 | mingerlin1001@berkeley.edu | www.linkedin.com/in/minger-lin
Personal website: https://mingerlin.github.io/

Education

University of California, Berkeley *Berkeley, CA*
Bachelor' of Arts, Data Science *08/2018 – 05/2020*

Courses: Urban Data Analytics, Machine Learning, Artificial Intelligence, Principles & Techniques of Data Science, Database Systems, Concepts in Computing with Data, Data Structures and Algorithms, Economic Analysis – Micro, Industrial Organization and Public Policy

Skills

- **Programming:** Python (Pandas, Mathplotlib, Scikit-learn, xarray, netCDF, Flask), Java, SQL, R, C++
- **Languages:** English (Fluent), Mandarin (Native), Cantonese (Native)
- **Certificates:** AWS Certified Cloud Practitioner

Experience

Data Science Intern *Remote*
Climate Action Guide *05/2020 – 09/2020*

- Collaborated closely with an engineering team of three other members 30+hrs a week
- Work closely and communicated with other team members to process large datasets and query data as meeting their requirements
- Implemented a Google sign-in button in the Frontend using ReactJS, where the sign-in button is meant to store customers basic information into a database that held in Amazon Relational Database Services
- Updated and designed the Backend to use a RESTful API with Flask to do economic loss calculation

Data Science Intern *Remote*
BearHouse Innovations *05/2020 - 08/2020*

- Collaborated closely with a data team of two other members 5+hrs a week
- Analyzed customers' Big Five personality using IBM Watson Personality Insights API and provided a data visualization that helped other teammates to analyze from it
- Used Google Apps Script to send SMS messages and calendar invitation to customers' phone number and email that stored in a Google spreadsheet

Math & ESL Tutor *Livermore, CA*
Las Positas College Tutorial Center *08/2016 - 08/2018*

- Served as a tutor member in Math Jam Bootcamp courses and Collaborated with faculties to create lesson plans, review worksheets, and held topics sessions to prepare 150+ students for weekly tests
- Conducted one-on-one tutoring sessions for various age groups about 5 students a week in Math (Algebra and Calculus) and English as Second Languages subjects

Course Projects

CYPLAN 101: Introduction to Urban Data Analytics *01/2020 – 05/2020*

- ***Community Profile****:* Created a community profile describes the population and household characteristics of census tract 4231 in the City of Berkeley and manipulated the ACS data with excel
- ***California Prop.13 Analyze****:* Analyzed the city of San Francisco under initiative Prop.13 from 1976 to 2014 and created 2 Carto interactive community profiles.

CS 189: Introduction to Machine Learning *01/2020 – 05/2020*

- Used Sklearn to implement a linear Support Vector Machines to classify MNIST (digits images) & spam & CIFAR-10 (10 categories images) datasets respectively and achieved a high accuracy of 95% on MNIST dataset
- Trained a Gaussian Discriminant Analysis classification model and fitted these models using MLE to classify digits images & Spam/Ham email and attained accuracy of 89% with LDA in MNIST dataset and 83% with QDA in Spam dataset
- Trained Logistic Regression classifier with Batch and Stochastic Gradient Descent on Wine dataset and implemented 5-folds Cross-Validation to tuned hyperparameter, and achieved an accuracy of 94%
- Implemented Decision Tree and Random Forest classifier in Python using One Hot Encoding for categorical features and limiting the max tree depth on Titanic & Spam datasets and achieve high an accuracy of 81% and 82% respectively

CS 186: Introduction to Database Systems *08/2019 – 12/2019*

- Created B+ tree for dynamic multilevel database file indexing with bulk loading
- Implemented iterator and join algorithms including PNLJ, BNLJ, External Sort Join, Sort Merge Join
- Built query optimizer that estimates cost, maintains statistics, and use System R Dynamic Programming to search for the optimal query plan
- Implemented table and page-level locking APIs for Lock Manager, Transaction and Request objects