# Cao Jilin

2315 Bowditch Street, Berkeley, CA 94704

☑ caojilin@berkeley.edu

**?** caojilin

□ 510-859-5316

#### **EDUCATION**

University of California, Berkeley Bachelor of Arts in Statistics, GPA:3.47

Santa Monica College

Bachelor of Arts in Statistics, GPA:4.0

**Berkeley, CA**Sep 2017 - May 2019

Los Angeles, CA

Sep 2015 - May 2017

# **Key Skills**

Python, R, Java, Git, Hypothesis Testing, SQL, AWS, Mxnet, Pytorch

#### **Related Coursework**

Deep Learning, Machine Learning, Data Structure, Probability, Linear Algebra, Linear Programming and Network Flow, Linear Modeling, Efficient Algorithms and Intractable Problems

# **PROJECTS**

Cloud Detection | R

*April* 2019 – May 2019

- o Used NASA satellite image data to develop a model to predict whether a given pixel is cloudy. A pixel in the image represents a 256m x 256m area in any place in the world. Fully investigated popular machine learning models such as KNN, SVM, Losgistic Regression, LDA/QDA, and Random Forests along with their performance and detailed diagnostics.
- o Link: https://github.com/caojilin/cloud-detection

#### **Predict Ames House Prices | Python**

April 2018 - May 2018

Preprocessed the dataset by imputation, normalizing skewed predictors and factorizing categorical predictors.
Used Ridge and Lasso regression with cross-validation to select the best model with the minimal RMSE and achieved 0.12 RMSE on the test dataset.

#### Image Captioning | Python

*March* 2019 – *April* 2018

- o Trained on the MSCOCO datasets with deep CNN and RNN models. The model can describe a given image with a detailed sentence. Detail in the github link.
- o https://github.com/caojilin/image-captioning

#### **EXPERIENCE**

**Data Analyst Intern** *State Grid Corporation* 

HangZhou, China

June 2017 - July 2017

o Our task is to extract meaningful information from a large real world dataset. We performed unsupervised clustering methods like PCA, K-means and EM. Discovered many interesting findings from graphs we drew.

# Lab Assistant for CS 61B and Stat 133

Berkeley, CA

Sep 2018 - Now

o Every week, I helped students understand the material covered in class and helped them work through their weekly labs and also worked at Office Hours. Stat133 is an introduction to computational data analysis class. cs61b is a data structure class.

### AWARDS AND ACHIEVEMENTS

- o 2018 Cal DataFest Team of Best Visualization
- o Language: Fluent in Chinese