

# JIALIN SHI

Los Angeles, CA | (617) 755-3156 | jialinsh@usc.edu

## EDUCATION

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<b>University of Southern California, Viterbi School of Engineering</b> , Los Angeles, CA	May 2020
Master of Science, Communication Data Science	GPA: 3.7 /4.0
<b>Boston University, College of Communication</b> , Boston, MA	December 2016
Bachelor of Science, Film and Television	GPA: 3.64/4.0
Honors: Magna Cum Laude (Top 15%), May 2017   Dean's list, Spring 2014	

## TECHNICAL SKILLS

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- **Programming:** Python (Libraries: Numpy, Pandas, Scikit-learn, Matplotlib), SQL
  - **Tools, IDEs and DBMS:** MySQL, Excel, Firebase, Cloud9, AWS-EC2, WEKA, MongoDB
  - **Knowledge of:** REST API, File System, HDFS, CURL
  - **Github link:** <https://github.com/AvivaJ/Jialin-Shi>

## PROJECT

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<b>Frog Species Identification (Multi-label &amp; Multi-class Classification) -</b>	March,2019
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- Trained a SVM which tags labels to each frog in terms of its family, genus, and species. Applied CV for best parameters for Gaussian kernels and one versus all classifiers.
- Implemented unsupervised learning (k-means clustering) based on Silhouettes score to cluster frog instances into groups. Evaluated model by averaging Hamming distance (obtained 4801).
- Implemented Monte Carlo Simulation for confidence (50 times, obtained 4874, std 211).

<b>Community and Crime Interpreter</b>	Feburay,2019
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- Performed data imputation techniques to deal with missing values in the data set.
- Trained a Lasso model to infer the relationship between the communities and crime rates, shrinking redundant features from 175 to 75. Compared Lasso model with PCR (feature projection).
- Used XGB and LGB algorithm to further understand the relationship.

<b>Predictive APS Failure at Scania Trucks Model</b>	Feburay,2019
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- Trained a random forest to classify the data set for future prediction. Evaluated model by calculating the confusion matrix, ROC, AUC(obtained 98.4%), and Out of Bag score (obtained 99.165%).
- Implemented SMOTE to remedy class imbalance. Trained a Logistic Model Tree with WEKA. After SMOTE, minor classes are classified more accurately than previous imbalanced data with lower FPR (from 29.1% to 17.6%) and higher Recall (from 70.9% to 82.4%).

<b>Smart Parking System (Database Management System)</b>	Jan.2019 till Current
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- Designed a system that manages a set of IoT devices through a cloud database. Built an E/R model and created corresponding relational models. Used MySQL to manage data. This system allows users to monitor and control the devices through the client app.

## WORK EXPERIENCE

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<b>Protean Image Group – P.I.G USA</b> , Venice, CA	October 2016- December 2017
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**Employee, Commercial Production Coordinator**

- Conducted feasibility researches on potential projects, participated in five commercial jobs from prep to production, negotiated with vendors and the creative department, offered alternative suggestions.
- Wrote a web crawler to capture information about worldwide film festivals, improving information collection efficiency

<b>Lowe China (Mullen Lowe China)</b> , Shanghai, China	January 2016 - March 2016
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**Intern, Advertising Account Executive**

Assisted with a comprehensive product launch for a large multinational car manufactures:

- Conducted market research on advertising strategies by seven competitor car companies
- Analyzed competitive brand information to develop product promotion strategies

## ADDITIONAL INFORMATION

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Asia Society   Volunteer, US-CHINA FILM SUMMIT	November 1 <sup>st</sup> 2016
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**Languages:** Mandarin-Native Speaker | Japanese-Native Speaker | English-Advanced