Jiade Song

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EDUCATION

- **Master of Science in Analytics** — Jan 2021-Dec 2022
  University of Southern California — Los Angeles, CA
- **Bachelor of Science in Industrial Engineering** — Aug 2018-Apr 2020
  University of Pittsburgh — Pittsburgh, PA
- **Bachelor of Engineering in Industrial Engineering** — Aug 2016-Jul 2020
  Sichuan University — Chengdu, Sichuan, China

SKILLS

- **Strong Statistical Analysis and Operations Research background** for my curriculum design.
- **Python**: Proficient, Applicated in *ML Summer Research, NLP & Data Analysis* (Numpy, Matplotlib, Pandas, Sklearn etc.)
- **R**: Proficient, Applied in course Information System Engineering (Kmeans, ggplot, cluster.stats, anova, t.test etc.)
- **Java**: Proficient, Studied in an intermediate course level (Search&Sorting, Exceptions, Data Structures, Recursion etc.)
- **SQL, MATLAB, Tableau and some Solver Software (cplex, gurobi)** are also in a proficient level.
- **SAP, Power BI, Google Analytics:** Practiced in Intern & online course/certificate.

EXPERIENCE

Consulting, Cloud Project Intern (Data Analyst & Data Engineering) — Sep 2020-Dec 2020
Deloitte, Shanghai

- Collaborated in ETL development team, did testing and verification work for team to make data ready to use.
- Coordinated in data middle platform construction program working with technicians of Alibaba on platform Dataphin (SQL based, including data visualization, data pipeline construction, data cleaning etc.)
- Programed user instruction book and user interface design and editing program.

Process and Controlling - Intern, Operation Department — Jan 2018-Feb 2018
China Huaneng Group, Liaoning

- Optimized materials transportation procedure and arrangement of work shifts/scheduling and equipment in a medium size of thermal power plant, decreased time needed for a routing inspection by 16.7%.
- Predicted output (Electric Power) by Simulation by seasonal inventory system analysis, EOQ and productivity analysis.
- Re-designed safety norms and quality principles by use of relevant knowledge of Human Factors and Quality Management.

ACADEMIC PROJECTS

Using Acoustic Sensors and Machine Learning to Locate Birds and Bats in the Field — May 2019-Aug 2019
Title: ML Research Assistant — *Supervisor: Prof. Justin Kitzes*

- Applied Python (Numpy, Pandas, sklearn, Matplotlib&Audio) to process collected audio data, including data processing, cleaning, noise reduction, visualization, Machine Learning model construction (based on **TensorFlow**).
- Calibration Chamber: Tested whether the machines to be deployed to the field is in good working condition and whether collected machine is damaged by analyzing calibration, volume and frequency balance data.
- Machine Learning: By transferring audio files into spectrograms, we generated model to identify target species from database. (Model fitted environments with frogs and birds well and was able to identify target species with 70% accuracy)

Yelp® Review "Helpfulness" Prediction Based on Multiple Features (ISE: 540 Text Analysis) — Sep 2021-Nov 2021
Instructor: Prof. Mayank Kejriwal

- Applied Python transform Yelp® Open Dataset to Text feature (Read-ease, Polarity, Subjectivity etc.), Word2vec, TF-IDF etc.
- Build several potential Ensemble learning model structures for feature matrix (Stacking, boosting etc.) and select multiple evaluation metrics. The accuracy with best candidate is 68% to 70%.

CORE COURSES

1. Machine Learning for Data Science
2. Database Management
3. Text Analysis
4. Predictive Analysis
5. Data Mining
6. Optimization Methods for Analysis
7. Operations Research
8. Decision Models
9. Statistical Testing & Regression
10. Probabilistic Method in OR