325 W Adams Blvd
Los Angeles, CA 90007

BOWEN(BRYSON) LI
HTTPS://BRYSONLEEZH.GITHUB.IO./

(323) 630-5773
bli61001@usc.edu
https://github.com/brysonleezh

EDUCATION

University Of Southern California **Los Angeles, CA** **Aug 2022 – May 2024 (Expected)**
- **M.S. in Analytics**
- **Coursework:** Predictive Analytics, Data Analytics Consulting, Database Management, Applied Statistics, Optimization

Dalian Polytechnic University **Dalian, China** **Aug 2018 – May 2022**
- **B.S. in Computer Science and Technology**
- **Coursework:** Web Technologies, Analysis of Algorithms, Computer Networking, Operating System, Data Structures.

SKILLS

- **Programming Language: Python** , **R** , **MySQL** , **Java** , C, HTML, CSS, C#, Stata, Docker, Shell
- **Other: Numpy** ,**Pandas** , **Sklearn** , **Keras** , **Tensorflow** , **Latex** , **Git**, Eclipse, Linux, Tableau, Microsoft Excel

PROFESSIONAL EXPERIENCE

Machine Learning Engineer Intern **Neusoft Corporation, Dalian** **July 2021 – Dec 2021**
- Used Pandas to execute data cleaning, predicted models with linear, quadratic regression, and visualized the results with **Matplotlib**.
- Conducted Pearson correlation product analysis and **random forest** modeling with R to classify broaching force situation of CNC(Computer numerical control) machine tool spindle and predict the accuracy rate of out-of-bag data: **90%**
- Integrated **Discrete Hopfield Neural Network** into SaCa RealRec, a one-stop machine learning and predictive analysis service platform based on big data distributed processing framework, to realize pattern recognition function.

Data Analyst Intern **Milyu Advertising Co., Ltd., Shanghai** **Oct 2020 - Jan 2021**
- Used Python with Mitmproxy to crawl more than 6000 notes on Xiaohongshu, and performed word frequency analysis (**TF-IDF**), sentiment analysis, article summary, article tags, and text similarity under the same topic.
- Developed web page based on **Flask** structure to realize the above functions.

RESEARCH AND PROJECT EXPERIENCE

Deep Learning Classification MRI Research **Oct 2021 - Dec 2021**
- Based on **Magnetic Resonance Image for Real Cases**, Collaborated with Hospital of China Medical University Executed image preprocess, such as statistical analysis of raw image, format and size conversion with **OpenCV** library.
- Extracted region of interest in the semantic segmentation with the **watershed algorithm**. Realized image augmentation, including rotation, zoom, random distortion, flipping.
- Built a **ResNet50** classification model with Keras, calculated F1-Score, and drew ROC curve to evaluate deep learning model's classification ability between normal people and multiple myeloma, multiple myeloma and osseous metastasis.

Android APP for Automatic Detection of Vegetable Species **Apr 2021 - May 2021**
- Crawled 15 kinds of vegetables 21,000 image data, Applied **Pillow** Library to realize image processing including resizing, rotation, and transformation.
- Trained **Inception-V3** model with Keras and Obtained 0.95 F1-Score on test dataset.
- Transformed HDF5 format model file to **TensorFlow Lite**, Deployed in Android Studio. Built Calling local album to upload image recognition and camera real-time recognition functions.

WES GPA Conversion System of DPU **May 2021 - June 2021**
- Applied **Flask** to build web structure and collocated the static file resource directories in Templates
- Used **BootStrap** to beautify the front-end page, and wrote the back-end code, including automatically simulating login using Selenium to fill the login form, and locating the table according to the HTML tag for crawling
- Used **Panda** and **Numpy** in Python to process the specific data, such as the replacement of credits for certain courses, or the deletion of courses, etc.

ADDITIONAL EXPERIENCE AND AWARDS

- Presided over the SICA International Students Dragon Boat Festival Gala in English; 06/2019
- Organized activities for members at Student Association as a leader; 04/2019