Mr. Zikang Chen

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Education

University of Southern California   08/2023 – 05/2025
M.S. in Analytics

University of California, San Diego   09/2019 – 03/2023
B.S. in Cognitive Science, specialization in Machine Learning and Neural Computation, Minor in Computer Science
- ✧ GPA: 3.7/4.0 | Awards: Provost Honors (2021 – 2023)

Skills

- ➢ Programming: Python (advanced), R (intermediate), Java (intermediate), MATLAB (beginner), C/C++ (beginner)
- ➢ Tools: Jupyter Notebook, R Studio, Markdown, GitHub, Android Studio, ZenHub, Bash, PowerShell, SSH

Professional Experience

Fuyang Branch of Hangzhou Planning and Natural Resources Bureau   *Data Analysis Intern*   07/2022 – 09/2022
- ➢ Processed data on land utilization and operational efficiency of 20,000 enterprises, with over 30 features in the data
- ➢ Developed a recommender system using k nearest neighbors to evaluate the efficiency of land utilization based on factors such as tax revenue, pollution and energy consumption; provided the optimal improvement scheme for enterprises with inefficient land utilization including recommendations for technological upgrade, extension and sale

Hangzhou Himalaya Information Technology Co., Ltd.   *Product Management Intern*   06/2021 – 08/2021
- ➢ Conducted black-box testing manually on the functions of the product website and WeChat mini program by filing over 50 bugs; collaborated with developers in improving the performance of the website and mini program by reducing errors and crashes on computers and phones by 90% through QA testing
- ➢ Wrote a competitive product analysis about WeChat and QQ and drew product structure diagrams using XMind

Project Experience

Image Classification with Optimized CNN [GitHub](#)   01/2023 – 03/2023
- ➢ Classified images in the CIFAR-10 dataset using a convolutional neural network
- ➢ Found the best-performing CNN design and optimization methods which achieved a testing accuracy of 81%, and compared the performance of our implementation to ResNet and AlexNet

Analysis of Movie Ratings [GitHub](#)   02/2023 – 03/2023
- ➢ Analyzed the reliability of IMDb ratings for Netflix movies by examining the factors that influence ratings, and provided insights to enhance the user experience for Netflix
- ➢ Identified trends and patterns in movie ratings across time and genres by utilizing data visualization and linear regression models, and conducting an ANOVA test to evaluate the difference between two time periods

Playing Dinosaur Game with Eye Blinks [GitHub](#)   01/2023 – 03/2023
- ➢ Successfully controlled the dinosaur to jump over obstacles in the Dinosaur Game using double eye blinks
- ➢ Collected blink signals from participants with an OpenBCI Cyton and EEG electrode cap, reduced noise in data using simple voltage thresholding and controlled the keyboard by processing signals with Python's Lab Streaming Layer

Rating Prediction with Collaborative Filtering [GitHub](#)   11/2022 – 12/2022
- ➢ Predicted the rating of clothes in a dataset which contains over 140,000 data of clothes measurements, customers' body measurements, fit feedback, and reviews
- ➢ Trained linear regression with text analysis, collaborative filtering with Jaccard similarity and latent factor model, reduced the mean squared error to 0.38 on test set, and examined the coefficient of each feature

Teaching Experience

University of California, San Diego   *Instructional Assistant and Tutor*   01/2022 – 03/2023
- ➢ Tutored data science, data structures, software tools and cognitive science classes; held over 40 cumulative office hours, graded students' programming assignments and provided feedback