

Mr. Zikang Chen

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Education

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: 3.69/4.0
- ✧ Awards: Provost Honors (2021 – present)

Skills

- Programming: Python (NumPy, Pandas, Matplotlib, Seaborn, scikit-learn, PyTorch), R, MATLAB, Java, C, C++
- Tools: Jupyter Notebook, Markdown, GitHub, Android Studio, ZenHub, Bash, PowerShell, SSH

Professional Experience

Zhejiang Bureau of Land and Resources *Intern in Department of Land Resource Management* 07/2022 – 08/2022

- Collected and processed detailed information on land utilization and operation condition of 20,000 enterprises, including over 30 features in each piece of data
- Built a machine learning model using k nearest neighbors to determine the efficiency of land utilization based on factors such as tax revenue, pollution and energy consumption, and provided the optimal improvement scheme for enterprises with inefficient land utilization, such as technological upgrade, extension and sale

Hangzhou Himalaya Information Technology Co., Ltd. *Product Management Intern* 07/2021 – 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

Playing Dinosaur Game with Eye Blinks [GitHub](#) 01/2023 – 03/2023

- Developed a control mechanism for the Dinosaur Game using double eye blinks
- Collected blink signals from participants with an OpenBCI Cyton, processed data using simple voltage thresholding and Python LSL

Rating Prediction from Clothing Fit Data [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

Predicting Heart Disease from Health Data [GitHub](#) 04/2022 – 06/2022

- Predicted whether a patient has heart disease by on over 300,000 patients' health data of BMI, sleep, and addiction
- Trained logistic regression, decision tree, support vector machine, and k-nearest-neighbor models, achieved an accuracy of 91% on test set by hyperparameter tuning and evaluated the models with various metrics

Teaching Experience

University of California, San Diego *Instructional Assistant and Tutor*

01/2022 – 03/2023

- Served as instructional assistant and tutor for data science, data structures, software tools and cognitive science classes; held over 40 cumulative office hours, graded students' programming assignments and provided feedback