Wangrui Lei

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EDUCATION

University of Michigan – Ann Arbor   *Jan. 2022 – May 2024*
Literature, Science and Arts – Honors Mathematics

- Related Courses: Programming and Intro Data Structures; Introduction to Combinatorics; Honors Introduction to Analysis

Central University of Finance and Economics (Beijing, China)   *Sep. 2019 – June 2021*

- Related Courses: Single Variable Calculus; Multivariable Calculus; Linear Algebra; Probability Theory and Mathematical Statistics

RESEARCH EXPERIENCE

Undergraduate Training Program for Innovation and Entrepreneurship
National Level Project, Research Project on Credit Risk Prediction of   *Sep. 2020 – Oct. 2021*
Listed Companies Based on Big Data Analysis Algorithm

- Applied filtering method, embedding method and packaging method to filter the indicators. Reduced the number of features, the operation time and the risk of over-fitting.
- Used Scikit-learn to build a Logit model on the processed data, put the processed data into training, and predicted the expected default status of SMEs
- Deployed LeNet Neural Network to increase the prediction accuracy rate.

WORK EXPERIENCE

Data-baker Technology (Beijing, China)   *July 2021 – Sep. 2021*
Speech Recognition Algorithm Intern, Sound comprehension department

- Used Kaldi to train GMM-HMM and DNN-HMM model, in order to increase the accuracy rate based on company self-owned language model library.
- Added sound resampling and channel separation function to VAD (voice activity detection) tool.
- Modified computer-assisted pronunciation training system from English version to Chinese version.

PROJECTS

Qihai Game Development and Culture Club   *Sep. 2020 – June 2021*
Club Member

- Built a platformer with teammates. Collected materials including pictures and special effect sound; Added functions such as moving, jumping, shooting, climbing, etc. to the character
- Realized the camera following and travelling of player; Used the A* algorithm to realize the enemy's follow-up of the character.

COMPETITIONS & AWARDS

- Chinese High School Mathematics League 2018, Provincial 3rd Prize
- Euclid Math Contest, Top 25% certificate, 2021
- Mathematical Contest in Modeling 2020, S Award
- China Undergraduate Mathematical Contest in Modeling 2020

TECHICAL STRENGTHS

Languages: C/C++, Python, Java
Other Software, Tools & Frameworks: Git, Linux Command Line, SQL, Anaconda Libraries