Qixuan Wang

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Education

South China University of Technology, GuangZhou, China 09/2017 – 03/2022

Major: Computer Science (Undergraduate),
GPA: 3.86/4.00(2017), 3.78/4.00(2018), 3.72/4.00(2019), 3.48/4.00(2020)

University of California, Berkeley, California, United States 01/2019 – 06/2019

Major: Mathematics and Computer Science (Visiting Student),
courses: CS61B(Data Structures), CS170(Efficient Algorithms and Intractable Problems)

Research Experience

South China University of Technology, Research Assistant 09/2019 – 02/2020

Development of the Meal Product Identification Technology that Used in the Cafeteria's Self-service Payment System

According to pictures and data provided by the Cafeteria, we developed the identification technology to recognize the meals' categories when they were captured by cameras.

- Reconstructed the code of training function of the proejct.
- Made some 4x4 images whose pixel values were all 127 and a two-layer neural network for unit test.
- Implemented 2 algorithms to cluster, label and evaluate newly labeled pictures with pretrained model.
- Trained the model with our own dataset, and kept debugging the model to make the prediction synthetically.

South China University of Technology, Research Assistant 10/2018 – 01/2019

Development of the Bus Scheduling System with Deep Reinforcement Learning Method

This project aimed synthetically to design a system to solve the bus scheduling problem. We mainly used the Deep Q Network(DQN) to build the machine learning model.

- Used Deep Neural Network to improve the learning model.
- Implemented the Q-learning algorithm with pytorch.
- Wrote the working process and reported weekly.

Working Experience

PLCT Lab - Aya Interactive Theorem Prover 10/2021 – 11/2021

Saint Francis University, Research Assistant 11/2022 – 03/2024

Transformation of sementic information of fonts

- Get contour points of any character of any font with OpenCV.
- Do the registration to get a 1-to-1 correspondence between those contour points.
- Do interpolation to transfer the stroke infomation from base font to object font.

Skills

- **Program Language**: not limited to any specific language, known Java Python C/C++, comfortable with Haskell Agda Lean (in random order).
- **Machine Learning**: Learned general knowledge of machine learning from lab and course, know pytorch and tensorflow.
- **Development Tool**: can adapt to any editors/operating systems, usually use JetBrains IDEs and VSCode under Ubuntu/macOS.

Awards

- First Prize in the 2018 National Collegiate Mathematics Competition
- Honorable Mention in the 2019 MCM/ICM
- Academic Merit Scholarships in the South China University of Technology, 2017-2018
- National Endeavor Scholarship, 2019-2020

Miscellaneous

- Languages: English - fluent (CET4: 605/710, CET6: 547/710), Chinese - native speaker, Japanese - beginner
- Final Design: reproduce https://github.com/cindydeng1991/TPAMI-CU-Net