Tianyin Wang

(+86)13668976019   isandrew.t.y.wong@gmail.com

EDUCATION

South China University of Technology (SCUT)   *Aug. 2019 - Jul. 2023*

Major in Computer Science, School of Computer Science & Engineering

Overall GPA: 3.96/4.0;   Ranking: 3/170

➢ Main Modules: Data Structures, Computer Organization&Architecture, Operating System, Computer Network, Database System, Design and Analysis of Algorithm, Neural Networks and Deep Learning, Artificial Intelligence

HONOR & AWARDS

Scholarship

The Second Class Scholarship, SCUT   *Oct. 2021*

Chien-Chung Tsai Third Class Scholarship, SCUT   *Oct. 2020*

Science And Innovation Third Class Scholarship, SCUT   *Sep. 2020*

Awards

Finalist in the 2021 Mathematical Contest in Modeling   *Apr. 2021*

Second Price in Contemporary Undergraduate Mathematical Contest in Modeling   *Nov. 2021*

RESEARCH EXPERIENCE

Unsupervise Relation Extraction | SCUT   *Aug. 2021- Present*

Advisor: Ziqian Zeng, Assistant Professor at SHIEN-MING WU School of Intelligent Engineering,SCUT

➢ Task: given a sentence, its subject and object then extract the relation between them

➢ Used pre-train textual entailment model to get pseudo label

➢ Proposed novel approaches to exploit top2 prediction and to fine-tune MNLI model

➢ Performance enhanced

SELECTED PROJECT EXPERIENCE

Neural Network Formula Recognition | SCUT   *Aug. 2021- Jan. 2022*

Advisor: Qianli Ma, professor and doctoral supervisor at School of Computer Science & Engineering,SCUT

➢ Task: Given images of mathematical formula then output their representations in LaTeX

➢ Used ResNet as encoder and a Transformer as decoder to build a network. Used Teacher Forcing to train

➢ Used Mask Language Model as a method to pretrain the model, ExactMatch improved 1.93%

➢ EditDistance reached 95.88% and ExactMatch reached 88.04%

➢ Used Fastapi and Streamlit to build user interface and web service

Auto Image Classification Project | SCUT   *Dec. 2021- Nov. 2021*

Advisor: Xingling Zhang, associate professor at School of Computer Science & Engineering, SCUT

➢ Combination of web scraper and deep learning

➢ Input the categories that need to be classified, then related samples will be scraped from Bing and then be used to train a classifier based on ResNet

- ➢ Web service deployment base on flask and Nginx

Online Shopping Mall Project | SCUT   *Aug. 2021- Sep. 2021*

Advisor: Shehui Bu, professor at School of Computer Science & Engineering, SCUT

- ➢ Built an online shopping mall for customers, merchants
- ➢ Goods information can be easily updated, customers and merchants can be informed timely
- ➢ Used Springboot to build Web application and used Vue to build user interface

Face Recognition Project | SCUT   *Jul. 2021- Dec. 2021*

Advisor: Guihua Wen, professor and doctoral supervisor at School of Computer Science & Engineering, SCUT

- ➢ Used framework face_recognition to compress the image, circled the face and extract face features

ACTIVITIES

Internet Technology Center | member   *Nov. 2019 - Nov. 2020*

- ➢ Develop Web Applications. e.g. Applications for online quizzes
- ➢ Maintain Official website of the department

SKILLS

- ➢ **Language:** English (TOEFL total 92), Chinese (native), Cantonese (native)
- ➢ **Programming Languages:** C++, Python, Java, HTML, JS
- ➢ **Frameworks:** Pytorch, flask, transformers, Springboot, Vue