Natural Language Processing, Data Mining, Symbolic Music Generation

Education

University of Electronic Science and Technology of China(UESTC)

Chengdu, P.R.China

Sept. 2015 - Exp. Jun. 2019

985, 211, ONE OF TOP 10 UNIVERSITIES IN COMPUTER SCIENCE

- · B.S. in Computer Science and Engineering
- GPA: 3.80/4, Average Score: 87.01/100, TOEFL: 95

Research Experiences_

Machine Learning Group - Microsoft Research of Asia

Beijing, P.R. China

RESEARCH INTERN

Nov. 2018 - Current

Jul. 2018 - Oct. 2018

Lethbridge, Alberta, Canada

· Working on finance data mining and deep learning, supervised by Dr. Weiging Liu.

• Designed a prediction model to evaluate the actual financial value using existed history data.

University of Lethbridge, Mitacs Globalink Program 2018

RESEARCH ASSISTANT

- Research assistance under supervision of Prof. Yllias Chali.
- During this period, I assist a PhD. to complete the evaluation part of a text summarization model. Furthermore, to improve the performance of summarization, especially the grammar, I reproduced a deep neural model based on VAE using PyTorch, and transfer the model into summarization task.
- I joined the discussion and development of a question answering model, which is related to Master's thesis. I also contributed to the programming part of the model.

Institute of Intelligent Learning Science and Applications of UESTC

Chengdu, P.R. China

Jun. 2016 - Jun. 2018

Undergraduate Research Program

- Research assistant in Natural Language Processing under supervision of Prof. Qu.
- During this period, I did some research on abstract summarization, and developed a deep model, which aimed to improve the quality of summarization result. This model took part in NLPCC 2018 Shared Task, and I wrote a pre-print draft to conclude my deep model.

Programs_

Symbolic Music Generation Model with Emotion Recognition and Adversarial Training

Chengdu, P.R.China Apr. 2017 - Sept. 2017

TEAM LEADER & CODER, INNOVATION FUNDING OF SCHOOL OF CSE

Built a music generation model, which is combined by two neural network units.

- User can input a sentence or an image, then emotion analysis module extracts a emotion vector.

 The music generation module receives the vector, and generate background music in different styles.
- Used Convolutional Neural Network, Cognitive Service, Deep Convolutional Generative Adversarial Network.
- Outstanding Prize, Yinxinghuang School-Level Innovation Program

Symbolic Music Generation Model Based On Reinforcement Learning and GAN

Chengdu, P.R.China Dec. 2017 - Feb. 2018

TEAM LEADER, MICROSOFT STUDENT PROJECT, UNDER THE SUPERVISION OF CHAO CHEN, STCA

• Transformed the reinforcement learning model SeqGAN to the field of music generation. Used Nottingham Dataset, and fine-tuned key parameters.

- Results are used in my independent game program in Imagine Cup 2018, which won 3rd prize in the final of the Sichuan regional competition
- Outstanding Prize, 2018 Microsoft Student Practice Space

Scholarships & Awards _____

2018 Mitacs Globalink Graduate Fellowship, CAD 15,000

Applied in Jan. 2019 2017 & 2016

2017 Renmin Scholarship 2017 & 2016, Chengdu, P.R.China

Extracurricular Activity _____

Microsoft Student Club in UESTC

Chengdu, P.R. China

PRESIDENT SINCE 2017

Sept. 2017 - Jun. 2018

NOVEMBER 27, 2018 YIXIAO ZHANG - RESUME