Peining Zhang

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Education

Rutgers University   2019 - 2021
Master of Science in Computer Science
Overall GPA: 3.94/4.0   *GRE*: 324 + 3
Coursework includes: Computer Vision, Natural Language Processing, Advanced Data Management, Machine Learning, Massive Data Storing and Retrival

University of Science and Technology of China   2015 - 2019
Bachelor of Science in Computer Science and Technology
Overall GPA: 3.24/4.3   *Rank*: 55/176

Research Experience

Semi-supervised Learning in Named Entity Recognition   Feb.2020 - Jan.2021
As Course Project and Essay for Graduation, advised by Sungjin Ahn
- Applied pre-trained ALBERT model on the problem Named Entity Recognition
- Implemented multiple Semi-supervised technique for semi-supervised learning

Seq-to-Seq Thematic Music Comments Generation   Feb.2018 - Jun.2020
Researcher Assistant, in Laboratory of Sematic Computing and Data Mining, USTC, advised by Linli Xu
- Collected music and comments from Web to construct well-paired music and text datasets
- Built a Seq2Seq model to generate text descriptions of music, with the dilated convolutional layer as the encoder and a memory based recurrent neural network as the decoder
- Improved the model by fine-tuning it with a discriminator to progress 13.5 on BLEU than MLE baseline

Improving the Evolutionary Search Algo   May 2017 - June 2018
Research Assistant, in USTC-Birmingham Joint Research Institute, advised by Ke Tang
- Added asymmetry to the distance measurement between the searching vectors to improve the efficiency of Negative Correlated Search for more than 10 times
- Improved effectiveness and surpassed all results of IEEE CEC-11 competition in application

Industry Experience

Realtime Advertising System   Jun.2021 - Persent
Machine Learning Engineer, in Kuaishou Technology Company
- Designed and implemented the zero-inflated model for GMV(Gross merchandise volume) prediction modeling for audience targeting
- Applied an MTL model with ESMM structure on CTR prediction problem and improved ranking model in the recommendation system based on DeepFM. The AUC increased by 3.7 percent
- Developed Real-time bidding system through user lifetime value modelling

Optical Character Recognition   Jan.2019 - Mar.2019
Machine Learning Engineer Intern, in Nantian Electronics Information Company
- Independently implemented the OCR project including region regression, text detection, recognition
- Used springboot to build web interface for remote access

Publications

Runlong Yu, Peining Zhang, Ke Tang. 2018. *Negatively Correlated Search with Asymmetry for Real-Parameter Optimization Problems* Journal of Computer Research and Development

Peining Zhang, Junliang Guo, Linli Xu, Mu You, Junming Yin. 2020. *Bridging Music and Text with Crowdsourced Music Comments: A Sequence-to-Sequence Framework for Thematic Music Comments Generation* submiited to AAAI.

Competitions

Kaggle – Quora Insincere Questions Classification   Silver Medal (26/3623)
Kaggle – VSB Power Line Fault Detection   Silver Medal (42/487)
USTC – USTC Mathematical Contest in Modeling   Second Prize (4/25)