

XINYI YU

(608) 733-7111 xinyiyu0424@gmail.com www.linkedin.com/in/xinyi-yu-5b821b164

SKILLS IN SOFTWARE/MACHINE LEARNING/ARTIFICIAL INTELLIGENCE

Programming Skills: Python(TensorFlow, Theano, PyTorch, Caffe), Java, C/C++, MATLAB, LUA, JavaScript, MySQL, R

Machine Learning Framework: RL, SVM, KNN, RNN, LSTM, CNN, VAE, GAN, COT, DQN, LightGBM

Collaboration Software: Git/Bitbucket, VUE, Confluence, Tableau

WORKING EXPERIENCE

Microsoft Research Asia, Research Intern

Jul. 2018 - Jun. 2019

Distributed Multi-Agent Reinforcement Learning

- Developed a LightGBM based Multi-agent Reinforcement Learning system to boost training speed and to improve the model's learning ability. Model increases shipping industry efficiency from 85% to 96%.
- Design a data visualizing debugging tool for the whole project. This tool can show the dynamic changes of each route, which helps to evaluate the performance of RL algorithm.

Qihoo 360 Lab, Research Intern

Apr. 2018 - Jul. 2018

GCN-based Deep Self-Adaptive Spatial Semantics for Domain Adaptation

- Proposed a GCN-based Deep Self-Adaptive Spatial Semantics method to effectively learn the similarity of source data and target data in hidden space. This method is applied to solve semi-supervised domain adaptation problem.
- Combined this model with Cross-Model Retrieval tasks and also achieved about 7% increase in adversarial domain adaptation performance.

EDUCATION

University of Wisconsin Madison

Sep. 2019 - May. 2021

Master in Computer and Information Sciences (Full Scholarship Supported)

Advisor: Michael Gleicher; Research: Data visualization, Machine Learning and HMI

Beihang University

Aug. 2015 - June. 2019

Bachelor in Computer Science

SELECTED RESEARCH AND PROJECTS EXPERIENCE

UW Graphics Lab, Research Assistant

Sep. 2019 - Present

A User-based Interactive System for Exploratory Model Visualization and Analysis

- Developing a user-based interactive System for automatic model comparison, feature detracton and visualization.
- The proposed model can be applied to multiple machine learning related problems and can help machine learning scientists to compare the differences between distinctive models and have deep analysis of those models by data features.
- Supporting the classifying problems in machine learning where it can visualize, compare and combine the classifying models, helping users to see the intrinsic problems exist in their models.

Udacity Data Engineering

Mar. 2019 - Sep. 2019

- Built an ETL pipeline that extracts data from S3, staged them in Redshift and transformed data into a set of dimensional tables for analysis team.
- Built a data lake and an ETL pipeline in Spark that loaded data from S3, processed the data into analyzing tables, and loaded them back into S3.
- Built data infrastructure for online streaming, created and automated a set of data pipelines with Airflow, monitored and debugged production pipelines.

PUBLICATION

Xinyi Yu, Wenge Rong, Zhuo Zhang, Zhang Xiong. "Multiple Level Hierarchical Network Based Clause Selection for Emotion Cause Extraction" In: IEEE Access, accepted (<https://ieeexplore.ieee.org/document/8598785>).

Xinyi Yu, Wenge Rong, Jingshuang Liu, Yuanxin Ouyang, Zhang Xiong. "LSTM-Based End-to-End Framework for Biomedical Event Extraction" In: IEEE/ACM Transactions on Computational Biology and Bioinformatics (TCBB), Accepted (<https://www.ncbi.nlm.nih.gov/pubmed/31095491>).

ACADEMIC SERVICE

Reviewer for Swarm and Evolutionary Computation, Elsevier, 2018.

Reviewer for AAAI 2019

Reviewer for WACV 2019

Reviewer for IJCAI 2019