Wenting Ye

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Education

Carnegie Mellon University, School of Computer Science — Pittsburgh, PA
Master in Computational Data Science (MCDS), Analytics track — Aug. 2018 – Dec. 2019

Beijing University of Posts and Telecommunications (BUPT) — Beijing, China
Bachelor of Engineering in Network Engineering, School of Computer Science — Sep. 2014 – July 2018

- Major GPA: **92.74**/100; Overall GPA **91.86**/100; Rank: **2**/145
- Received National Scholarship (top 1%) for three consecutive years

Professional Experience

Toutiao AI lab, Bytedance Inc. — Beijing, China
Machine Learning Intern to Dr. Changhu Wang — Nov. 2017 – May 2018

Action Proposal Convolutional Neural Network (Bachelor Thesis)

- Proposed a novel convolutional neural network for action detection, which extended ability of static 2D Faster R-CNN to incorporate temporal information by linking action candidates from different frames
- Modeled the problem of finding top K potential action trajectory as a maximum cost maximum flow problem, and designed an efficient greedy algorithm for training action sample generation
- Evaluated the performance of our model on UCF-Sports dataset, yielding Mean Average Precision 88.6

Research Experience

Machine Learning Department, Carnegie Mellon University — Pittsburgh, PA
Advisor: Prof. Eric P. Xing and Haohan Wang — July 2017 – Sep. 2017

Genetic Association Database Based on Deep Reinforcement Learning

- Obtained the medical articles and genetic information using official APIs and web crawlers
- Presented our works at *2017 CMU LTI Student Research Symposium*
- Finished an acdemic manuscript and submitted to *2019 Pacific Symposium on Biocomputing*

Language Technologies Institute, Carnegie Mellon University — Pittsburgh, PA
Advisor: Haohan Wang — Oct. 2016 – June 2017

A Sparse Graph-structured Lasso Mixed Model for Genetic Association with Confounding Correction

- Extended the ability of the linear mixed model to taking the dependency information between different traits into account based on the graph-fused lasso
- Conducted extensive experiments on both simulated and real-genome datasets to demonstrate that the proposed model outperforms other competitive models
- Wrote a manuscript reporting our work, which has been put on arXiv and prepared for submission to *BMC Bioinformatics*

Sparse Variable Selection on High Dimensional Heterogeneous Data with Tree Structured Responses

- Developed a model for variable selection in high dimensional heterogeneous dataset with tree structured response
- Analyzed the performance gap among different models and experimental settings
- Completed an academic paper, which has been put on arXiv and ready for *2019 AAAI*

Skills

Programming Languages
Python (Proficient), C/C++ (Proficient), Java (Intermediate), Pascal (Intermediate), JavaScript (Intermediate), Assembly (Intermediate), LaTeX(Intermediate), Bash (Intermediate), MATLAB (basic)
Frameworks and Tools
MXNet, Docker, Qt GUI, Django, Git

Publication

- Cao, J., Wu, Z., **Ye, W.,** & Wang, H. Learning Functional Embedding of Genes Governed by Pair-wised Labels. IEEE International Conference on Computational Intelligence and Applications **(ICCIA 2017 oral presentation)**