Wenting Ye

yewenting.github.io

EDUCATION

Beijing University of Posts and Telecommunications (BUPT)

Beijing, China

Major in Network Engineering, School of Computer Science

Sep. 2014 - Present

Email: wenting_ye@bupt.edu.cn Mobile: (+86) 132-4126-4126

- Major GPA: **92.74**/100; Overall GPA **91.86**/100; Rank: **2**/145
- Member of Yepeida School (90 students selected among more than 3000 students), supervised by Prof. Chuan Shi

RESEARCH INTEREST

Machine Learning, Data Mining, Computer Vision

Publication

- Ye, W., Liu, X., Wang, H., & Xing, E. P. A Sparse Graph-structured Lasso Mixed Model for Genetic Association with Confounding Correction. arXiv:1711.04162 [cs.LG]
- Liu, X., Wang, H., Ye, W., & Xing, E. P. Sparse Variable Selection in High Dimensional Heterogeneous Data with Tree Structured Responses. arXiv:1711.08265 [stat.ME]
- Cao, J., Wu, Z., Ye, W., & Wang, H. Learning Functional Embedding of Genes Governed by Pair-wised Labels. ICCIA 2017 oral presentation

RESEARCH EXPERIENCE

Language Technologies Institute, Carnegie Mellon University

Pittsburgh, PA, U.S.

Research Intern to 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 incorporate the dependency information between different traits based on the graph-fused lasso
- Conducted extensive experiments on both simulated and real-genome dataset to demonstrate that the proposed model outperformed other competitive models like SCAD, MCP, lasso multi-marker mixed model and etc
- \bullet Wrote a manuscript reporting our work, which has been put on arXiv and submitted to 2018 RECOMB

SPARSE VARIABLE SELECTION ON HIGH DIMENSIONAL HETEROGENEOUS DATA WITH TREE STRUCTURED RESPONSES

- Put forward a model for variable selection in high dimensional heterogeneous dataset with tree structured response
- Analyzed the performance gap between different models and experimental settings
- Completed an academic paper, which has been put on arXiv and submitted to Bioinformatics

Machine Learning Department, Carnegie Mellon University

Pittsburgh, PA, U.S. July 2017 – Sep. 2017

Research Intern to Prof. Eric P. Xing and Haohan Wang

GENETIC ASSOCIATION DATABASE BASED ON DEEP REINFORCEMENT LEARNING

- Obtained the medical articles and genetic information using official APIs and web crawlers
- Prepared a poster and presented our works at 5th Annual LTI Student Research Symposium
- Working for extracting more reliable genetic information from the abstract

GENAMAP

- Opted for a more efficient matrix decomposition method to save the 50% of computation time
- Supported PLINK file (a genome data format) as input and preprocessed the missing value in the data

Toutiao AI lab, Bytedance Inc.

Research Intern to Dr. Changhu Wang

MULTI-LABEL VIDEO ACTION RECOGNITION SYSTEM

Beijing, China Oct. 2017 – Present

- Built a naïve activity recognition model based on mask R-CNN to detect the position of individual and identify their behaviors
- Trying to incorporate the additional information in the actions corresponding to interactions between persons

SELECTED PROJECTS

- GenAMap: An open-source platform for visual machine learning of genome-phenome associations
- SmartTrip: A travel route planning system for course *Programming for Data Structures*, which addresses NP-hard route optimization problem based on simulated annealing algorithm
- IoT Management System: A management website for course Web Programming Techniques which can control and communicate with the remote device through and display its information

AWARD & HONOR

National Scholarship (top 1%)

Oct. 2015, Oct. 2016, Oct. 2017

Awarded by Ministry of Education of China for three times

Interdisciplinary Contest In Modeling Meritorious Winner

Jan. 2016

Awarded by the Consortium for Mathematics and Its Applications

First Prize in National Olympiad in Informatics in Provinces

Nov. 2013

Awarded by the China Computer Federation

Conference and Presentation

• CMU LTI Student Research Symposium

Presentation, Aug. 2017

• China Workshop on Machine Learning and Applications

Attendance, Nov. 2017

LEADERSHIP EXPERIENCE

BUPT Alibaba Technology Association

Beijing, China

Vice President in Big Data Group

Oct. 2015 - Present

- Hosted a 20-day data mining competition, namely the 2nd BUPT big data competition, which attracted 199 teams with 404 students to participate
- Negotiated with the sponsor *summet Inc.* and *BUPT Information Technology Center* to develop a online platform to evaluate the performance of models
- Organized a series of lectures about machine learning and data mining to provide undergraduates with the opportunity of studying the cutting-edge topic

SKILLS

Programming Languages

Python, C/C++, Java, Pascal, JavaScript, MATLAB, MIPS Assembly Language, IATEX

Frameworks and Tools

MXNet, Docker, Qt GUI, Django, Git

Language Proficiency

English (full professional proficiency) Mandarin (native)

Japanese (beginner) Foochow (half native)

Personal Interest

Basketball, piano, traveling (I have explored more than 25 cities), symphonies