# 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

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- 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

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

Ye, W., Liu, X., Wang, H., & Xing, E. P.

Intelligent Systems for Molecular Biology (ISMB 2018) (submitted)

• Sparse Variable Selection in High Dimensional Heterogeneous Data with Tree Structured Responses.

Liu, X., Wang, H.,  $\mathbf{Ye},\,\mathbf{W}.,\,\&$  Xing, E. P.

Bioinformatics (submitted)

• Learning Functional Embedding of Genes Governed by Pair-wised Labels.

Cao, J., Wu, Z., Ye, W., & Wang, H.

IEEE International Conference on Computational Intelligence and Applications (ICCIA 2017 oral presentation)

### Presentation

• Everlasting Intric Researcher (Eir): Identifying the Article and Reading for Genetic. Association Database.

Wang, H., Liu, X., & Ye, W.

Carnegie Mellon University Language Technologies Institute Student Research Symposium (SRS 2017 poster presentation)

#### RESEARCH EXPERIENCE

## Toutiao AI lab, Bytedance Inc.

Beijing, China

Research Intern to Dr. Changhu Wang

Oct. 2017 - Present

MULTI-LABEL VIDEO ACTION RECOGNITION SYSTEM

- Built an action recognition model based on mask R-CNN to detect the positions of individual and identify their behaviors
- Working on an algorithm to find the optimal path between frames and adjusted the detection results accordingly

### Machine Learning Department, Carnegie Mellon University

Pittsburgh, PA, U.S.

Research Intern to 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
- Prepared a poster and presented our works at 2017 CMU LTI Student Research Symposium
- Working for extracting more reliable genetic information from the abstract

GENAMAP

- $\bullet$  Opted for a more efficient matrix decomposition method and consequently saved the 50% of computation time
- Supported PLINK file (a genome data format) as input and preprocessed the missing value

## Language Technologies Institute, Carnegie Mellon University Research Intern to Haohan Wang

Pittsburgh, PA, U.S.

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 outperforms other competitive models
- Wrote a manuscript reporting our work, which has been put on arXiv and submitted to Intelligent Systems for Molecular Biology (ISMB 2018)

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 among different models and experimental settings
- Completed an academic paper, which has been put on arXiv and submitted to Bioinformatics

### 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 sunmnet 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 platform to learn the cutting-edge topic

# 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 an NP-hard route optimization problem based on simulated annealing algorithm

# 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

#### SKILLS

### Programming Languages

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

#### 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 (school basketball team), piano, traveling (I have explored more than 25 cities), symphonies