Jiameng PU

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Education Background

School of Computer Science, Wuhan University (WHU, China) 09/2013-07/2017

- **Major:** Computer Science and Technology GPA (Major): 86.75/100 (15%)
- **Degree:** Bachelor of Engineering
- **National Endeavor Fellowship** (twice, 4%, Ministry of Education) 09/2014&09/2015
- **Core Courses:** Linear Algebra 96, Combinatorial Mathematics 95, Probability and Mathematical Statistics 91, Object-Oriented Programming 95, Pattern Recognition 92, Data Structure 89
- **On-line Courses:** Machine Learning (Stanford University, Andrew Ng)
  Neural Networks for Machine Learning (University of Toronto, Geoffrey Hinton)
- **TOEFL:** 98 (R 29, L 24, S 18, W 27) 06/2016
- **GRE:**322(V155(68%below),Q167(93%below),AW3.0(17%below) 05/2016

Paper

Jiameng Pu, Qian Zhang, Lefei Zhang, Bo Du, Jane You, ***Multiview Clustering Based on Robust and Regularized Matrix Approximation***, Accepted, 2016 International Conference on Pattern Recognition (ICPR 2016).

Research Assistant

State Key Laboratory of Software Engineering, WHU **Research Assistant** 08/2015-06/2016

- Participated in the research group of Prof. Bo DU and led a team to conduct the program Multiview Clustering Based on Robust and Regularized Matrix Approximation;
- Developed a more comprehensive understanding of machine learning, computer vision and data mining;

Internship

IBM China Development Labs, Lab Based Services **Data Science Intern** 09/2016-11/2016

- Statistical analysis, e.g. application of survival analysis model in different fields
- Participating in integrating and analysing data in the transport system, optimize traffic conditions, e.g. application of A-star algorithm, dijkstra algorithm.

Research Experience

Multiview Clustering Based on Robust and Regularized Matrix Approximation

Advisor: Prof. Bo DU 11/2015-02/2016

Overview: Based on the nonnegative matrix factorization (NMF), this research proposes a novel multiview clustering algorithm, the Robust and Regularized Matrix Approximation (RRMA). We introduce the robust $\ell 2,1$-norm and ensemble manifold regularization to make the model more discriminative for multiview data clustering. The results demonstrate the superiority of our model compared to some state-of-the-art methods.

Responsibility: Team Leader

- Learnt the most up-to-date clustering and multiview clustering algorithms;
- Proposed a new NMF-based model for multiview clustering;
- Wrote codes in the Matlab/Octave & used different methods to adjust the parameters;
- Gathered classic datasets & proved the proposed model by contrast tests;
- Wrote and revised the paper.

Development of Guide System of Scenic Spots in WHU Advisor: Prof. Xuefei LI 06/2015

Overview: Based on the route of scenic spots in WHU, the project aims to develop a guide system with the functions of navigation, ticket-booking and tourists' evaluation.

Responsibility: Team Member

- Wrote codes based on the graph data structure and proposed several ideas, such as evaluating the quality of the scenic spots, sharing scenic spots on social networking sites, to attain better functions;
- Designed User Interface with Photoshop, Axure, Illustrator.

Establishment of Spam Mail Classification System Advisor: Prof. Xiaoming LIN 04/2015

Overview: In this project, an SVM-based spam classifier is established. It uses word stemming to process the original e-mails and updates the vocabulary list of spam, which increases the rate of classification accuracy to 99%.

Responsibility: Team Leader

- Trained SVM with Gaussian Kernel;
- Preprocessed E-mails (lowercasing, normalizing values like URLs/dollars/numbers and word-stemming);
- Updated words used to get word indices in the vocabulary list to avoid overfitting the training set.

Collaborative Filtering-based Film Recommender System Advisor: Prof. Lefei ZHANG 10/2014

Overview: Based on linear algebra and machine learning, this project establishes a film recommender system with collaborative filtering, and makes further research on the recommender systems of Netflix, Amazon, etc.

Responsibility: Individual Project

- Gathered movie samples for a movie rating dataset;
- Wrote codes based on collaborative filtering learning algorithm, of which the key points include collaborative filtering objective function and gradient.

Professional Skills

- Familiar with programming languages, such as C, C++, Python, Java, JavaScript, HTML
- Familiar with Matlab, Octave, MyEclipse, Visual Studio, IDEA

Awards & Activities

Participated in Vision and Learning Seminar 2016, Wuhan (VALSE 2016) 04/2016

- Attended research reports in face recognition, deep learning, visual reality

3rd Prize of College Students' Innovation & Entrepreneurship Competition (10%), WHU 10/2015

2nd Prize of The 21st Translation Contest in Hubei Province (4%), The Translators Association of Hubei Province 10/2014

Leader of the English Club in WHU 05/2014-09/2015

Main member of the Network Department of Students' Union in WHU 09/2013-07/2014

Hobby

Photography/ Design User Interface with Photoshop, Illustrate

Take courses on Coursera/Udacity