Honglin Yu

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Research Interests Data Mining, Machine Learning, Online Social Network Analysis

Education Australian National University

Aug. 2011 - present

Ph.D. in Computer Science

- Thesis Topic: Popularity Analysis of YouTube Videos
- Work at Machine Learning group of NICTA
- Thesis will be submitted before Aug. 2015

Southeast University, China

Aug. 2009 - Jul. 2011

Finished master course in Automation

Southeast University, China

Aug. 2005 - June 2009

Bachelor of Automation

- Rank: 4/140
- Best Graduation Thesis (2 out of 140)

Skill Highlights

• Experienced in Data Science and Statistical Analysis

- Classification, regression, clustering, time series analysis
- Data exploration and visualization (matplotlib, R, d3.js)
- Working on large scale **real data** for >3 years
- Broad knowledge in Machine Learning
 - Deep understanding of main-stream algorithms (SVM, Random Forest, ANN etc.)
 - Experienced in carrying out experiments and **feature engineering**
- \bullet Firm programming skills, especially in C/C++ and python
 - Also familiar with SQL, Javascript, R, Julia
 - Use Linux everyday for more than 6 years, skilled emacs user
- Experienced in collecting and analyzing large scale Internet data
 - Skilled in implementing various online data crawlers
- Domain knowledge related to Computational Social Science Research
 - YouTube video popularity analysis
 - Twitter user network analysis
- Basic controller design

Research Projects

Please see http://yuhonglin.github.io/project/ for more details

- Analyzing Twitter-driven YouTube Views
 - Predicting videos' viewcount with Twitter's feed (**Demo**)
 - Contributions: Most of the ideas; All the Software implementation, data collection, analysis and prediction
- Data Mining on YouTube Video Shot Sequences
 - Mining frequent remixed shots from large number of videos
 - Contributions: Part of the ideas and data collection; All the implementation, data preprocessing and analysis
- Exploring the Phases of Popularity Evolution of YouTube Videos
 - Understanding viewcount dynamics by novel time series segmentation techniques
 - Contributions: Most of the ideas; All the software implementation, data collection, analysis and prediction

Software
Highlights

- YTcrawl: a YouTube video history viewcount crawler
- SegFit: a time series segmentation algorithm written in C++
- Shotdetect: a video shot detection program written in C++

Papers

- Honglin Yu, Lexing Xie and Scott Sanner, Twitter-driven YouTube Views: Beyond Individual Influencers. Published in ACM Mutimedia 2014.
- Honglin Yu, Lexing Xie and Scott Sanner, Exploring the Popularity Phases of YouTube Videos: Observations, Insights, and Prediction. To appear in ICWSM-15.

Teaching Experience

- Computational Social Science Summer Short Course Teaching Assistant, Beihang University, China
- Jul. 2013

2011

• Computer Network
Teaching Assistant, Southeast University, China

Awards

Excellent Graduation Dissertation of Southeast University (2 out of 140)
 Champion of the 3D Soccer Simulation League, Robocup Worldcup
 National Mathematical Modeling Contest Third Prize of Jiangsu Province
 Higher Mathematics Competition of Jiangsu Province, Third Prize
 2008

Review Experience

- International World Wide Web Conference (WWW)
- ACM International Conference on Web Search and Data Mining (WSDM)

Language

Chinese (native)

English (fluent)

References

Dr. Lexing Xie Senior Lecturer Research School of Computer Science Australian National University affiliated with NICTA Email: lexing.xie@anu.edu.au Phone: (+61) 2 612 51646 Dr. Scott Sanner Principal Researcher

Machine Learning Group, NICTA Adjunct at Computer Science Australian National University Email: scott.sanner@nicta.com.au

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