# Honglin Yu

School of Computer Science, Australian National University, NICTA Email: honglin.yu@anu.edu.au

Homepage: http://yuhonglin.github.io Mobile: +61 406502886

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
- 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: 4/120
- Best Graduation Thesis (2 out of 120)

# Skill Highlights

- Firm programming skills, especially in C/C++ and python
  - Also familiar with Javascript, R, Julia
  - Use Linux everyday for more than 6 years, skilled emacs user
- Broad knowledge in Machine Learning
  - Deep understanding of most used algorithms (SVM, Random Forest, ANN etc.)
  - Experienced in carrying out experiments and feature engineering
- Experienced in collecting and analyzing large scale Internet data
  - Skilled in implementing various online data **crawlers**
  - Familiar with mainstream databases
- Domain Knowledge related to Computational Social Science Research
  - YouTube video popularity analysis
  - Twitter user network analysis
- Basic Controller Design
  - Undergraduate major

## 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 of 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++
- Shot detect : 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. In preparation for resubmission.

# Teaching Experience

- Computational Social Science Summer Short Course Teaching Assistant, Beihang University, China
- Computer Network
  Teaching Assistant, Southeast University, China

## Awards

Excellent Graduation Dissertation of Southeast University (2 out of 150)
 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
Phone: (+61) 2 6267 6330

Jul. 2013

Dr. Henry Gardner

Associate Professor and Reader

College of Engineering & Computer Science

Australian National University Email: henry.gardner@anu.edu.au

Phone: (+61) 2 612 58181