Yingjun Dong

Ph.D. Candidate in System Science at SUNY Binghamton ● (607) 304-0550 ● ydong25@binghamton.edu
yingjundong.com

Education

Binghamton University, State University of New York **Jan 2017 - May 2021 Expected**
Doctor of Philosophy, System Science
Cumulative GPA: 3.89/4.00

Binghamton University, State University of New York **Aug 2015 - Dec 2016**
Master of Arts, Economics
Cumulative GPA: 3.22/4.00

Shandong Normal University **Sep 2011 - Jun 2015**
Bachelor of Economics, International Economics and Trades
Cumulative GPA: 3.00/4.00
School Second-Class Scholarship *July 2013*
School Third-Class Scholarship *July 2014*

Skills

Languages: Python, LaTeX, Shell Script, MATLAB
Tools: OpenCV, CUDA, Scikit-Learn, TensorFlow, Keras, FFmpeg, Vim
Knowledge: Feature Selection, Data Mining, Machine Learning

Professional Experience

Graduate Research Assistant at Binghamton University – SUNY **Aug 2019 – Present**
- Graduate research assistant for Center for Collective Dynamics of Complex Systems (CoCo) Organized Research Center (ORC).

Research Assistant at Binghamton University – SUNY **Aug 2019 – Jul 2019**
- Project: Diversity, network structure, and the effectiveness of collective design and innovation (Award #: NSF SES-1734146)
- Project: Collective planning and leadership for the U.S. Army

Teaching Assistant at Binghamton University – SUNY **Aug 2017 – May 2018**
- Teaching assistant for SSIE 505 Probability and Statistics
- Teaching assistant for SSIE 520 Simulation and Modeling

Publications & Presentation

[Presentation] Yingjun Dong and Hiroki Sayama, Optimizing Facial Feature Extraction for Emotion Detection on Mobile Devices. *NERCCS2019: Second Northeast Regional Conference on Complex Systems*, April 3-5, 2019, Binghamton, NY.

[Presentation] Yiding Cao, **Yingjun Dong**, Minjun Kim, Neil MacLaren, Ankita Kulkarni, Shelley Dionne, Francis Yammarino, and Hiroki Sayama, Examining the effects of expertise diversity on collective design and innovation using an online social network experiment and "idea geography" visualization: An initial report, presented as a talk at *NERCCS 2019: Second Northeast Regional Conference on Complex Systems*, April 3-5, 2019, Binghamton, NY.

[Presentation] Yiding Cao, **Yingjun Dong**, Minjun Kim, Neil Maclaren, Ankita Kulkarni, Shelley Dionne, Francis Yammarino, and Hiroki Sayama, Examining the effects of expertise diversity on collective design and innovation using an online social network experiment and "idea geography" visualization: A secondary report, presented as a talk at the *2019 Conference on Complex Systems (CCS 2019)*, September 30-October 4, 2019, Singapore.

[Proceedings] Yiding Cao, **Yingjun Dong**, Minjun Kim, Neil MacLaren, Ankita Kulkarni, Shelley Dionne, Francis Yammarino, and Hiroki Sayama, Capturing the production of innovative ideas: An online social network experiment and "Idea Geography" visualization, presented as a talk at *CSS 2019: 10th Anniversary International Conference on Computational Social Science*, October 24-27, 2019, Santa Fe, NM.

[Proceedings & Presentation] Yingjun Dong and Hiroki Sayama, Mutual-information-based feature selection for facial emotion recognition on light-weight devices, *Proceedings of the 2019 IEEE Symposium Series on Computational Intelligence (IEEE SSCI 2019 -- IEEE CIDM 2019)*, December 6-9, 2019, Xiamen, China, IEEE.

Featured Projects

Narrative Data Analysis **August 2018 – Present**
- An application in NLP, using Doc2Vec to analyze persons' self-introduction text.
- Tools: Python

Feature Selection on Facial Landmarks **August 2018 – April 2019**
- Applied hybrid feature selection method with combining information theory, hierarchical clustering and genetic algorithm on facial landmarks to removing redundant features and improving computational efficiency.
- Conducted SVM classifier on selected features, and compared the classification accuracy rate.
- Tools: Python

Course Projects

Community Analysis of Social Network Separation **May 2018**
- In this team project, we separate the Facebook Social Network into two groups which have different level of degree.

- We analyzed necessary properties of networks, such as the number of edges, average clustering coefficient, number of communities and the largest communities of respective networks.
- Tools: Python

Agent-Based Model on Population Migration **December 2017**

- In this team project, we built dynamic model for population migration.
- Tools: Python

Markov Chain Based Modeling and Analysis of Bank Service Process **December 2017**

- In this team project, we applied markov chain to build dynamic model for bank service and do analysis.

Relevant Courses

Stochastic Systems	Advanced Topics in Network Science
Fuzzy Sets, Fuzzy Logic and Fuzzy Systems	Operation Research
Collective Dynamics of Complex Systems	Applied Probability and Statistics
Modeling and Simulation	Introduction to System Science
Computational Tools	Microeconomics Theory
Macroeconomics Theory	Econometric Method
Economic Forecasting	Markets with Fictions

Volunteer Activities

Math Tutor at Elementary School **March – May 2016**

- Location: Endicott, USA
- Help kids to complete math works.

Volunteer at Jinan City Children Welfare House **August 2014**

- Location: Jinan, China
- Clean kids' toys and play with disability kids.

Honors & Awards

The 13th Challenge Cup of College Students Extra-Curricular Academic Technology Works Competition **May 2013**

- Awards: The Second Prize in Provincial-level.
- Location: Jinan, China