Fengnan Gao

Personal Details

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Education

Sep. 2012 - present	PhD student of Prof. Dr. Aad van der Vaart Leiden University, The Netherlands Research Topics: *Nonparametric Bayesian Statistics, High-dimensional Statistics in Networks, Probabilistic Methods in Networks* *Expected: Summer of 2016*
Sep. 2010 - Sep. 2011	Master of Science in Industrial and Applied Mathematics Department of Mathematics & Computer Science / EURANDOM Eindhoven University of Technology, The Netherlands
Aug. 2009 - Aug. 2010	Master of Science in Industrial Mathematics Department of Mathematics Kaiserslautern University of Technology, Germany **Aggregate grade: Very good (*Sehr Gut*)**
Sep. 2005 - Jun. 2009	Bachelor of Science in Statistics Department of Mathematics Nanjing University, China **Major GPA 88/100 Rank 4/43**

Papers

2015	Posterior contraction rates for deconvolution of Dirichlet-Lapalace mixtures *Eletronical Journal of Statistics* `http://projecteuclid.org/euclid.ejs/1457123508`
2015	On the Asymptotic Normality of Estimating the Affine Preferential Attachment Network Models with Random Initial Degrees *Submitted to Stochastic Processes and their Applications* `http://arxiv.org/abs/1603.02625`

In preparation

2016	On the Asymptotic Normality of Estimating Parametric Preferential Attachment functions
2015	On the Consistency of Estimating General Preferential Attachment functions
2014	Modeling and Inference of Networks of the Internet Movie Database with Preferential Attachment Model

Talks & Presentations

Dec. 2016	Invited talk for the closing workshop of *Dynamic Networks* In *the Issac Newton Institute for Mathematical Science*, To be given in *Cambridge, UK*
Jul. 2016	World Congress in Probability and Statistics To be given in *Toronto, Canada*
May 2016	Invited talk in Shanghai Center for Mathematical Science In *Shanghai, China*
Jul. 2015	European Meeting of Statisticians In *Amsterdam, The Netherlands*
Jun. 2015	10th Conference on Bayesian Nonparametrics In *Raleigh, NC, The USA*

Academic Activities

Sep. 2015	Statistics Mathematics and Applications	In *Fréjus, France*
Jun. 2014	Institute of Mathematical Statistics Annual Meeting	In *Sydney, Australia*
Mar. 2014	Spring School of Structural Inference in Statistics	
	In *Königs Wusterhausen, Germany*	
Nov. 2013	STATS IN PARIS STATISTICS & ECONOMETRICS OF NETWORKS	
	In *ENSAE, Paris, France*	
Jul. 2013	29th European Meeting of Statisticians	In *Budapest, Hungary*
Jun. 2013	9th Conference on Bayesian Nonparametrics	In *Amsterdam, The Netherlands*
Mar. 2013	Spring School of Structural Inference in Statistics	In *Bad Belzig, Germany*
Sep. 2010	European Summer School in Industrial Mathematics	In *Milan, Italy*

Master Thesis

Sep. 2011　Master thesis - Modeling and Inference of Internet Movie Database
`http://alexandria.tue.nl/extra1/afstversl/wsk-i/gao2011.pdf`
Supervisors: Remco van der Hofstad & Rui Castro
We analyzed the dataset from the Internet Movie database (IMDb) with Python, Matlab, SQL from a network perspective. We proposed a modified version of preferential attachment model for the evolution of the movie-actor network of the IMDb. With parameters estimated by statistical procedures, the simulation results resemble the reality. Using probabilistic inequalities and martingale arguments, we proved rigorously that, in the model described, the (movie) degree sequence converges to a explicit sequence as the network size goes to infinity.

Scholarships & Awards

2016	IMS travel award *To facilitate travelling for the World Congress in Probability and Statistics to Toronto, Canada*
2015	ISBA travel award *To facilitate travelling for 10th BNP conference to Raleigh, NC, The USA*
2005 - 2008	Three years of Renmin Scholarships from Nanjing University *Awarded for excellent academic performance*

Computer Skills

R, **Python**, Matlab, SQL, SAS, C++
Experienced user in LaTeX as a contributor in China TeX group

Hobbies

Photography, Amateur Road Biking, Rowing