Room 1723, 310 Bloor Street West, Toronto, ON, M5S1W4 <u>kai.b.yang@utoronto.ca</u> Web Page: <u>http://www.individual.utoronto.ca/09yangka/</u> (More detailed information about me could be obtained from my web page)

Curriculum Vitae

(Last Updated: Oct.2nd, 2011)

Education

2010.9-Present	Victoria College, Faculty of Arts and Science, University of Toronto •Honours Bachelor of Science, Expected Graduation: June 2012.
	 Specialist in Mathematics and Its Applications,
	Probability/Statistics Stream
	 Cumulative GPA 4.0/4.0, Course Average 98/100
2009.9-2010.8	University of Toronto at Scarborough
2008–2009	Fudan College, Fudan University, Shanghai, China
	 Major in Management and Economics

Employment

Winter 2011	Teaching Assistant for MATA33H3 Calculus for Management II,
	University of Toronto
	Responsibilities include:
	 Holding regular tutorial sessions and office hours
	 Designing and grading weekly quizzes
	 Invigilating mid-term and final exams
Fall 2010	Teaching Assistant for STAB22H3 Statistics I, University of Toronto
Summer 2010	Teaching Assistant for STAB22H3 Statistics I, University of Toronto
2008-2009	Class Representative for MATH120001 Calculus I, Fudan University

Research Experience

Fall 2011 & Spring 2012	Supervised Study in Probability, Statistics Dept., University of Toronto •Supervisor: Prof. Balint Virag
	 Topics: Random Walks on Graphs, Percolation Theory and Random Matrix Theory
0	
Summer 2011	Summer Research Student, Statistics Dept., University of Toronto
	 Supervisors: Prof. Jeffrey Rosenthal & Prof. Radu Craiu
	 Topic: Regime Change Adaptive MCMC Algorithms
	•Velvet Revolution in Adaptive MCMC: The Benefits of Regime Change
	 Dirichlet Process Mixture Models for Regime Change Algorithms
	 Supported by University of Toronto Excellence Award (UTEA)
Fall 2010	Supervised Research Student, Statistics Dept., University of Toronto
	•Supervisor: Jeffrey Rosenthal
	 Topic: Markov Chain Monte Carlo algorithms

	 Optimal Scalings & General State Space Adaptive MCMC Algorithms
Summer 2010	Supervised Study in Mathematics, Math Dept., University of Toronto
	•Supervisor: Lisa Jeffrey
	 Topic: Differential Topology
	•Final Report: On Some Aspects of DeRham Cohomology and Morse
	Theory
Summer 2010	Summer Project Student, Statistics Dept., University of Toronto
	•Supervisor: Balint Virag
	 Topic: Markov Chains and Mixing Times
	 Mixing Time of Lazy Simple Random Walk on the N-Cycle (and on
	d-Dimensional Torus)
	•Mixing Times of Totally Asymmetric Exclusion Process (TASEP) on the
	N-cycle
2009.2 - 2009.6	Research Student, Department of Economics, Fudan University, China
	•Supervisor : Rangrang Bai
	 Optimal Pricing Strategy with Market Power
	 Supported by "Qi Hang" Undergraduate Research Award

Honours

2011.8	The Margaret Ronald Taylor and Thomas Paxton Taylor Award
2011.7	The Alumni of Victoria College Award
2011.7	University of Toronto Scholar Award
2011.6	Dean's List Scholar, University of Toronto
2011.4	University of Toronto Excellence Award (UTEA-NSE)
2011.2	Samuel Beatty Award, University of Toronto
2010.12	Shou Yun Pang Scholarship, University of Toronto
2009-10	Dean's Honor Roll, University of Toronto
2010	2010 Mathematical Contest in Modeling (MCM), Honorable Mention
2009	"Qi Hang" Undergraduate Research Award, Department of Economics,
	Fudan University, China
2009	Fudan University Scholarship, Fudan University
2009	College Leadership Award, Fudan College, Fudan University

Academic Affiliations/Activities

Affiliations:

Member:	Toronto Probability Seminar, Undergraduate Math Union Summer
	Seminar, Summer 2010
Invited Lecturer:	Association of Mathematics and Computer Science Students
	(AMACSS), University of Toronto

Talks:

June 2010	New Mixing Times of Lazy Random Walks on N-cycle, Toronto
	Probability Seminar
July 29, 2010 and	Review sessions for Introduction to Probability (Invited Lectures),

Dec 3, 2010 AMACSS

Conferences:

April 28, 2011 Graduate Student Research Day, Fields Institute, Toronto, Canada

Other Extracurricular Activities and Experience

2008.12-2009.4	Vice-President of AIESEC, Fudan Univ., China
	Major responsibilities include:
	•Directing local committee to successfully develop and implement
	international exchange program
	 Administering goal-setting workshops and chairing regular local executive meetings
	•Organizing various activities with our business advisors such as PwC
	Career Night
	 Coordinating company visits
2011.9-2011.11	Ideas for the world seminar, Victoria College, University of Toronto
2010.8.25-2010.9.8	Volunteered for 2010 Shanghai Expo as a facilitator
2009-2010	Volunteer note taker for Accessibility Service at University of Toronto
2009-2010	Math tutor for MATB41H, MATB24H, STAB52H
2008.12	Volunteered as a facilitator during "Hello Allo Canada" Cultural
	Exchange Festival, Shanghai, China.
2007.5-2007.8	Volunteered at "Kong Jiang" Community Health Center, China.

Computer and Language Skills

Computer Skills	•Experienced with software development in R, Python (including Scipy &
	Numpy), SAS, Mathematica, and MATLAB.
Languages	 Fluent in English and Mandarin Chinese