Weijia (Grace) Yin

CONTACT INFORMATION	+1 (778) 929-0150 grace.yin@ubc.ca https://github.com/graceyin06
RESEARCH INTERESTS	Measurement Models, Bayesian Inference, Probabilistic Inference, Machine Learning

EDUCATION

University of British Columbia   September 2015 - May 2020 (Expected)

Bachelor of Science, Honours in Statistics

RESEARCH EXPERIENCE

Probabilistic Inference over Permutations   October 2019 - Present
Research Supervisor: **Professor Benjamin Bloem-Reddy**

Bayesian Estimation for Cronbach's Alpha   July 2019 -Present
Research Supervisor: **Professor Bruno Zumbo and Professor Edward Kroc**
- Conducted Simulation studies and tests in R to explore the deep understanding of Bayesian estimators for Cronbach's Alpha

Hardy Inequalities   May 2018 - June 2018
Research Supervisor: **Professor Nguyen LAM**
- Calculated the exact remainder terms of some versions of Hardy-type Inequalities with Bessel Pairs and radial derivatives

Caffarelli-Kohn-Nirenberg Inequalities   July 2018 - December 2018
Research Supervisor: **Professor Nguyen LAM**
- Used suitable quasiconformal mappings to study the sharp versions and the optimizers of Caffarelli-Kohn-Nirenberg Inequalities

PUBLICATIONS

- N. T. Duy, P. Le-Long, and **W. Yin**: *Hardy inequalities and Caffarelli-Kohn-Nirenberg inequalities with radial derivative*, Journal of Mathematical Inequalities, **Accepted**. Mentored by Dr. Nguyen LAM.

- N. T. Duy, N. Lam-Hoang, N. A. Triet, and **W. Yin**: *Improved Hardy inequalities with exact remainder terms*, **submitted**.

CONFERENCE TALKS

- Improved Hardy Inequalities with Exact Remainder Terms, 2018 Canadian Mathematical Society (CMS) Winter Meeting in Vancouver. (December 8th 2018)

- Hardy Inequalities and Bessel Pairs, BC Undergraduate Mathematics and Statistics Conference (BC UMSC). (April 25th 2019)

OTHER TALKS

- Vine Copula in Statistical Modelling, UBC Machine Learning Reading Group mentored by Alexandre Bouchard, with Zuheng Xu and Kevin Chern. (2019 Fall)
- PAC-Bayes Bound of Neural Networks, UBC Machine Learning Reading Group mentored by Benjamin Bloem-Reddy, with Matteo Lepur. (2019 June)

PROFESSIONAL SERVICE

Journal of IEEE Transaction on Cybernetics   March 5th 2019

RELEVANT SKILLS

Languages: English, Mandarin
Programming: LaTeX, Python, R, MATLAB, MySQL, Java

SELECTED COURSEWORK	○ Probability Theory (graduate) ○ Stochastic Process (graduate) ○ Statistical Inference (graduate) ○ Real Analysis ○ Methods for Statistical Learning ○ Design and Analysis of Experiments ○ Relationships in Data

EMPLOYMENT   Look4Tutor Institute, Vancouver, B.C.

University-Level MATH Tutor,   September 2018 - September 2019

○ Teach calculus, linear algebra and mathematical proof courses
○ Support students with exam preparation to help them improve their grades

OTHER EXPERIENCE   UBC Sports Analytic Club   September 2019 - Present

LAST UPDATED   November 16, 2019