Qiong Zhang Updated: July 2021

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Github: www.github.com/SarahQiong/

Homepage: https://sarahqiong.github.io/

Research Interests Distributed Learning, Mixture Model, Optimal Transportation, Applications of Deep Learning

**EDUCATION** 

University of British Columbia

Vancouver, British Columbia, Canada

Ph.D. (Statistics)

Supervisor: Professor Jiahua Chen

Cumulative GPA: 4.0/4.0

University of British Columbia

Vancouver, British Columbia, Canada

M.Sc. (Statistics)

Supervisor: Professor Jiahua Chen

Thesis Title: Small Area Quantile Estimation under Unit-Level Models

Cumulative GPA: 4.0/4.0

University of Science and Technology of China

Hefei, Anhui, China

B.Sc. (Statistics), School of the Gifted Young

Cumulative GPA: 3.66/4.3

09/2011 - 06/2015

09/2017 - present

09/2015 - 09/2017

**Publications** 

Under Review

- Qiong Zhang and Jiahua Chen. "Minimum Wasserstein Distance Estimator under Finite Location-scale Mixtures." Available at arXiv:2107.01323.
- Qiong Zhang and Jiahua Chen. "Distributed Learning of Finite Gaussian Mixtures." Available at arXiv:2010.10412.
- Qiong Zhang and Jiahua Chen. "A Unified Framework for Gaussian Mixture Reduction with Composite Transportation Distance." Available at arXiv:2002.08410.

# Refereed Papers

- Qiong Zhang\*, Xin Ding\*, William J Welch, "Classification Beats Regression: Counting of Cells from Greyscale Microscopic Images based on Annotation-free Training Samples" CAAI International Conference on Artificial Intelligence, 2021 (34.5% acceptance).
- Zhanshou Chen, Jiahua Chen, and **Qiong Zhang**. "Small area quantile estimation via spline regression and empirical likelihood." Survey Methodology 45-1 45, no. 1 (2019): 81-99.
- Philippe Phan, Brandon Budhram, **Qiong Zhang**, Carly S. Rivers, Vanessa K. Noonan, Tova Plashkes, Eugene K. Wai et al. "Highlighting discrepancies in walking prediction accuracy for patients with traumatic spinal cord injury: an evaluation of validated prediction models using a Canadian Multicenter Spinal Cord Injury Registry." The Spine Journal 19, no. 4 (2019): 703-710.
- Qiong Zhang\*, Bo Chang\*, Shenyi Pan, and Lili Meng. "Generating handwritten Chinese characters using CycleGAN." In 2018 IEEE Winter Conference on Applications of Computer Vision (WACV), pp. 199-207. IEEE, 2018 (45.9% acceptance).

#### Talks

#### POSTER PRESENTATION

- 2019 Statistical Society of Canada: Classification Beats Regression in Cell Counting from Microscopic Images.
- 2018 Joint Statistical Meeting Data Expo: Do I really need a jacket?
- 2018 Winter Conf. on Applications of Computer Vision: Generating handwritten Chinese characters using CycleGAN.

#### Contributed Talks

- 2021 UBC/SFU Joint Student Seminar: Distributed Learning of Finite Gaussian Mixtures.
- 2016 Statistics Canada: Estimation of small area means and quantiles using EBLUP, Pseudo-EBLUP and M-quantile approaches.

### Honors and Awards

$\bullet$ Winner of Statistical Society of Canada Annual Meeting Case Study 1	2019
• Margaret Wylie Memorial Scholarship in Statistics	2017
• International Doctoral Fellowship	2017 - 2021
• Faculty of Science Graduate Award	2017 - 2021
• CANSSI scholarship	2016
• UBC International Tuition Award	2015 - 2021
• USTC Outstanding Undergraduate Scholarship	2013/2014
• USTC Outstanding Freshman Scholarship	2011

### TEACHING EXPERIENCE

Teaching Assistant, University of British Columbia Held weekly labs and office hours, marked assignments and exams

• STAT 305: Introduction to Statistical Inference	07/2021 - 08/2021
• STAT 251: Elementary Statistics	05/2021 - 06/2021
• STAT 300: Intermediate Statistics for Applications	01/2021 - 04/2021
• STAT 344: Sample Surveys	09/2020 - 12/2020
• STAT 302: Introduction to Probability	09/2019 - 04/2020
• STAT 461/561: Statistical Theory II	01/2019 - 04/2019
• STAT 306: Finding Relationships in Data	09/2018 - 12/2018
• STAT 200: Elementary Statistics for Applications	09/2015 - 04/2018

Teaching Assistant, University of Science and Technology of China Held weekly TA office hours, marked assignments and exams

• Linear A	Algebra (B1)	02/2015 - 06/2015
• Linear A	Algebra (B2)	09/2014 - 01/2015

## OTHER

• UBC Trainer for Teaching Assistant

# Professional Experience & Activities

#### Internship

HUAWEI NOAH'S ARK LAB, MARKHAM, ON

05/2020 - 09/2020

Research Intern Computer Vision Team Supervisor: Dr. Juwei Lu

Project Title: Cross Domain Few Shot Learning

RICK HANSEN INSTITUTE, VANCOUVER, BC

05/2017 - 08/2017

Research Intern

Supervisor: Dr. Nader Fallah

Project Title: Prediction for Prognosticating Independent Walking after Spinal Cord Injury

STATISTICS CANADA, OTTAWA, ON

06/2016 - 08/2016

Research Intern

International Cooperation and Corporate Statistical Methods Division

Supervisor: Dr. Yong You

Project Title: Estimation of Small Area Means and Quantiles using EBLUP, Pseudo-EBLUP

and M-quantile Approaches

Organizer & Conference Volunteer

• Constance van Eeden Lecture Organizer 2019 – 2020

• UBC/SFU Joint Seminar Organizer

2017 - 2019

2018 JSM-ICSA Volunteer
ICSA-Canada Chapter 2017 Symposium Volunteer

08/2018 08/2017

Reviewer

• Neural Information Processing Systems (NeurlPS)

HARDWARE AND SOFTWARE SKILLS Programming: Proficient with R, Python; some experience with C, Matlab, SAS

Deep Learning API: Pytorch, Tensorflow Office & Publishing: Microsoft Office, LATEX