

CONTACT INFORMATION	Department of Statistics University of British Columbia 3182 Earth Sciences Building 2207 Main Mall Vancouver, BC, Canada V6T 1Z4	<i>E-mail:</i> <a href="mailto:qiong.zhang@stat.ubc.ca">qiong.zhang@stat.ubc.ca</a> <i>Tel:</i> +1 (778) 681-2643 <i>Github:</i> <a href="https://github.com/SarahQiong/">www.github.com/SarahQiong/</a> <i>Homepage:</i> <a href="https://sarahqiong.github.io/">https://sarahqiong.github.io/</a>
RESEARCH INTERESTS	Distributed Learning, Mixture Model, Optimal Transportation, Applications of Deep Learning	
EDUCATION	<div>           UNIVERSITY OF BRITISH COLUMBIA  <i>Vancouver, British Columbia, Canada</i>  <b>Ph.D. (Statistics)</b>            Supervisor: Professor <a href="#">Jiahua Chen</a>            Cumulative GPA: 4.0/4.0            09/2017 – present         </div> <div>           UNIVERSITY OF BRITISH COLUMBIA  <i>Vancouver, British Columbia, Canada</i>  <b>M.Sc. (Statistics)</b>            Supervisor: Professor <a href="#">Jiahua Chen</a>            Thesis Title: Small Area Quantile Estimation under Unit-Level Models            Cumulative GPA: 4.0/4.0            09/2015 – 09/2017         </div> <div>           UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA  <i>Hefei, Anhui, China</i>  <b>B.Sc. (Statistics), School of the Gifted Young</b>            Cumulative GPA: 3.66/4.3            09/2011 – 06/2015         </div>	
PUBLICATIONS	UNDER REVIEW <ul style="list-style-type: none"> <li>• <b>Qiong Zhang</b> and Jiahua Chen. “Minimum Wasserstein Distance Estimator under Finite Location-scale Mixtures.” Available at <a href="https://arxiv.org/abs/2107.01323">arXiv:2107.01323</a>.</li> <li>• <b>Qiong Zhang</b> and Jiahua Chen. “Distributed Learning of Finite Gaussian Mixtures.” Available at <a href="https://arxiv.org/abs/2010.10412">arXiv:2010.10412</a>.</li> <li>• <b>Qiong Zhang</b> and Jiahua Chen. “A Unified Framework for Gaussian Mixture Reduction with Composite Transportation Distance.” Available at <a href="https://arxiv.org/abs/2002.08410">arXiv:2002.08410</a>.</li> </ul>	
	REFEREED PAPERS <ul style="list-style-type: none"> <li>• <b>Qiong Zhang</b> and Jihua Chen. “Robustness of Gaussian Mixture Reduction for Split-and-Conquer Learning of Finite Gaussian Mixtures” 3rd International Conference on Statistics: Theory and Applications (ICSTA), 2021.</li> <li>• <b>Qiong Zhang*</b>, Hanwen Liang*, Peng Dai, and Juwei Lu. “Boosting the Generalization Capability in Cross-Domain Few-shot Learning via Noise-enhanced Supervised Autoencoder” International Conference on Computer Vision (ICCV), 2021 (25.9% acceptance).</li> <li>• <b>Qiong Zhang*</b>, Xin Ding*, and 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).</li> <li>• Zhanshou Chen, Jiahua Chen, and <b>Qiong Zhang</b>. “Small Area Quantile Estimation via Spline Regression and Empirical Likelihood.” Survey Methodology 45-1 45, no. 1 (2019): 81-99.</li> </ul>	

- 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).

\* Equal contribution.

## TALKS & PRESENTATIONS

### POSTER PRESENTATION

- Statistical Society of Canada: Classification Beats Regression in Cell Counting from Microscopic Images. 06/2019
- Joint Statistical Meeting Data Expo: Do I Really Need A Jacket? 08/2018
- Winter Conference on Applications of Computer Vision: Generating Handwritten Chinese Characters using CycleGAN. 03/2018

### TALKS

- Joint Statistical Meeting: Distributed Learning of Finite Gaussian Mixtures. 08/2021
- 3rd International Conference on Statistics: Theory and Applications: Robustness of Gaussian Mixture Reduction for Split-and-Conquer Learning of Finite Gaussian Mixtures. 07/2021
- UBC/SFU Joint Student Seminar: Distributed Learning of Finite Gaussian Mixtures. 03/2021
- UBC/SFU Joint Student Seminar: Generating Handwritten Chinese Characters using CycleGAN. 03/2018
- Statistics Canada: Estimation of Small Area Means and Quantiles using EBLUP, Pseudo-EBLUP and M-quantile Approaches. 08/2016

## HONORS AND AWARDS

- 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, created and marked assignments and exams*

- STAT 404: Design and Analysis of Experiments 09/2021 – 12/2021
- 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 Algebra (B1) 02/2015 – 06/2015
- Linear Algebra (B2) 09/2014 – 01/2015

#### OTHER

- Trainer for Teaching Assistant Program (UBC Statistics Department) 09/2019 – 09/2021
- Instructional Skills Workshops 11/2019

#### 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 Student Seminar Organizer 2017 – 2019
- 2018 JSM-ICSA Volunteer 08/2018
- ICSA-Canada Chapter 2017 Symposium Volunteer 08/2017

##### REVIEWER

- Neural Information Processing Systems (NeurIPS)

#### HARDWARE AND SOFTWARE SKILLS

Programming: Proficient with R, Python; some experience with C, Matlab, SAS  
 Deep Learning API: Pytorch, Tensorflow  
 Office & Publishing: Microsoft Office, L<sup>A</sup>T<sub>E</sub>X