

# CURRICULUM VITAE of Prof. LONGHAI LI

Department of Mathematics & Statistics  
University of Saskatchewan  
106 Wiggins RD  
Saskatoon, SK, S7W0G8  
CANADA

## 1. PERSONAL

- Born in Nov. 1979.
- Citizen: Canadian
- Official webpage: <https://artsandscience.usask.ca/profile/LLi>
- Professional web site: <https://longhaik.github.io>
- Phone: +1 (306) 966-6095
- Email: [longhai.li@usask.ca](mailto:longhai.li@usask.ca), [longhai@math.usask.ca](mailto:longhai@math.usask.ca)

## 2. DEGREES

- Ph.D., University of Toronto, 2007, Statistics  
Supervisor: [Radford M. Neal](#)  
Thesis: BAYESIAN CLASSIFICATION AND REGRESSION WITH HIGH DIMENSIONAL FEATURES
- M.Sc., University of Toronto, 2003, Statistics
- B.Sc., University of Science and Technology of China, 2002, Statistics.

## 4. Employment History

- Full Professor, July 1st, 2018, Dept. of Math & Stat., Univ. of Saskatchewan, SK
- Associate Professor, July 1st, 2012, Dept. of Math & Stat., Univ. of Saskatchewan, SK
- Assistant Professor, July 1st, 2007, Dept. of Math & Stat., Univ. of Saskatchewan, SK
- Research Intern, Nov. 2006 to Feb. 2007, Microsoft Research, Redmond, WA, USA

## 7. LEAVES

- Sabbatical Leave, Jan. 1st, 2025 to June 30th, 2025.
- Sabbatical Leave, July 1st, 2020 to June 30th, 2021.
- Parental Leave, Jan. 1, 2019 to June 30, 2019.
- Sabbatical Leave, July 1, 2013 to June 30, 2014.

## 9. TEACHING ACTIVITIES

### 9.1 Scheduled Instructional Activity

YEAR	COURSE	Term	TITLE	INTR. TYPE	ENRL	YIH	YCSH
2024-2025	STAT 348	T1	Sampling Techniques	LEC	15	39	585
2024-2025	STAT 812	T1	Computational Statistics	LEC	5	39	195
2024-2025	STAT 420	T1	Topics in Computational Statistics	LEC	1	39	39
2024-2025	BIOS 996	T1T2	Research Supervision (Ph.D.)	RES	1		
2024-2025	BIOS 996	T1T2	Research Supervision (M.Sc.)	RES	1		
2024-2025	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	1		
2023-2024	STAT 245	T1	Introduction to Statistical Methods	LEC	91	39	3549
2023-2024	STAT 812	T1	Computational Statistics	LEC	5	39	195
2023-2024	STAT 420	T1	Topics in Computational Statistics	LEC	1	39	39
2023-2024	STAT 443	T2	Linear Statistical Models	LEC	4	39	156
2023-2024	STAT 851	T2	Linear Models	LEC	4	39	156
2023-2024	BIOS 996	T1T2	Research Supervision (Ph.D.)	RES	1		
2023-2024	BIOS 996	T1T2	Research Supervision (M.Sc.)	RES	1		
2023-2024	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	1		
2022-2023	STAT 348	T1	Sampling Techniques	LEC	35	39	1365
2022-2023	STAT 812	T1	Computational Statistics	LEC	3	39	117
2022-2023	STAT 420	T1	Topics in Computational Statistics	LEC	1	39	39
2022-2023	STAT 443	T2	Linear Statistical Models	LEC	1	39	39
2022-2023	STAT 851	T2	Linear Models	LEC	1	39	39
2022-2023	BIOS 996	T1T2	Research Supervision (M.Sc.)	RES	1		
2022-2023	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	1		
2022-2023	BIOS 996	T1T2	Research Supervision (PH.D.)	RES	1		
2021-2022	STAT 244	T2	Elementary Statistical Concepts	Lec	72	39	2808
2021-2022	STAT 342	T1	Mathematical Statistics	Lec	8	39	312
2021-2022	STAT 443	T2	Linear Statistical Models	Lec	3	39	117
2021-2022	STAT 851	T2	Linear Models	Lec	5	39	195
2021-2022	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	2		
2021-2022	MATH 994	T1T2	Research Supervision (PH.D.)	RES	1		
2021-2022	BIOS 996	T1T2	Research Supervision (PH.D.)	RES	1		
2021-2022	ENGR 996	T1T2	Research Supervision (PH.D.)	RES	1		
2020-2021	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	3		
2020-2021	BIOS 996	T1T2	Research Supervision (PH.D.)	RES	1		
2020-2021	ENGR 996	T1T2	Research Supervision (PH.D.)	RES	1		
2019-2020	STAT 245	T1	Introduction to Statistical Methods	LEC	128	39	4992
2019-2020	STAT 345	T2	Design and Analysis of Experiments	LEC	27	39	1053
2019-2020	STAT 834	T2	Advanced Experimental Design	LEC	1	39	39
2019-2020	STAT 812	T1	Computational Statistics	LEC	5	39	195
2019-2020	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	1		
2019-2020	BIOS 996	T1T2	Research Supervision (PH.D.)	RES	1		
2019-2020	ENGR 996	T1T2	Research Supervision (PH.D.)	RES	1		
2018-2019	STAT 812	T1	Computational Statistics	LEC	11	39	429
2018-2019	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	2		
2018-2019	BIOS 994	T1T2	Research Supervision (M.Sc.)	RES	2		
2018-2019	BIOS 994	T2	Research Supervision (PH.D.)	RES	1		

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YEAR	COURSE	Term	TITLE	INTR. TYPE	ENRL	YIH	YCSH
2018-2019	MATH 996	T1T2	Research Supervision (PH.D.)	RES	1		
2017-2018	STAT 241	T1	Probability Theory	LEC	70	39	2730
2017-2018	STAT 345	T2	Design and Analysis of Experiments	LEC	25	39	975
2017-2018	STAT 834	T2	Advanced Experimental Design	LEC	9	39	351
2017-2018	STAT 841	T2	Probability Theory	LEC	5	39	195
2017-2018	MATH 994	T1T2	M.Sc. Research Supervision	RES	5		
2016-2017	STAT 812	T1	Computational Statistics	LEC	12	39	468
2016-2017	STAT 348	T2	Sampling Techniques	LEC	33	39	1287
2016-2017	STAT 442	T2	Statistical Inference	LEC	1	39	39
2016-2017	STAT 846	T2	Sp. Topics in Math & Stat (Statistical Inference)	LEC	8	39	312
2016-2017	MATH 994	T1T2	M.Sc. Research Supervision	RES	6		
2015-2016	STAT 245	T1	Intro. to Stat. Methods	LEC	157	39	6123
2015-2016	STAT 342	T1	Mathematical Statistics	LEC	7	39	273
2015-2016	STAT 242	T2	Stat. Theory & Methodology	LEC	11	39	429
2015-2016	MATH 994	T1T2	M.Sc. Research Supervision	RES	5		
2015-2016	MATH 996	T1T2	Ph.D. Research Supervision	RES	1		
2014SS	STAT 245	T2	Intro to Statistical Methods	LEC	30	39	1170
2014-2015	STAT 342	T1	Mathematical Statistics	LEC	9	39	351
2014-2015	STAT 812	T1	Computational Statistics	LEC	10	39	390
2014-2015	STAT 348	T2	Sampling Techniques	LEC	21	39	819
2014-2015	STAT 442	T2	Statistical Inference	LEC	5	39	195
2014-2015	STAT 846	T2	Sp. Topics (Statistical Inference)	LEC	8	39	312
2014-2015	STAT 244	T2	Elementary Statistical Concepts	LEC	14	39	546
2014-2015	MATH 994	T1T2	Research Supervision (M.Sc.)	RES	4		
2014-2015	MATH 996	T1	Research Supervision (Ph.D.)	RES	2		
2012-2013	STAT 241	T1	Probability Theory	LEC	51	39	1989
2012-2013	STAT 348	T2	Sampling Techniques	LEC	15	39	585
2012-2013	STAT 245	T2	Intro to Statistical Methods	LEC	135	39	5265
2012-2013	MATH 994	T1T2	Research (M.Sc. Co-Supervision)	RES	2		
2012-2013	MATH 996	T1T2	Research (Ph.D. Co-Supervision)	RES	2		
2011-2012	STAT 241	T1	Probability Theory	LEC	43	39	1677
2011-2012	STAT 342	T1	Mathematical Statistics	LEC	3	39	117
2011-2012	STAT 841	T1	Probability Theory	LEC	10	39	390
2011-2012	STAT 245	T2	Intro to Statistical Methods	LEC	138	39	5382
2011-2012	MATH 994	T1T2	Research (M.Sc. Co-Supervision)	RES	2		
2010-2011	STAT 241	T1	Probability Theory	LEC	42	39	1638
2010-2011	STAT 846	T1	Computational Statistics	LEC	8	39	195
2010-2011	STAT 242	T2	Stat. Theory & Methodology	LEC	13	39	507
2010-2011	MATH 994	T1T2	Research (M.Sc. Co-Supervision)	RES	2		
2010-2011	MATH 996	T1T2	Research (Ph.D. Co-Supervision)	RES	1		
2009-2010	STAT 342	T1	Mathematical Statistics	LEC	4	39	156
2009-2010	STAT 841	T1	Probability Theory	LEC	6	39	234
2009-2010	STAT 241	T2	Probability Theory	LEC	28	39	1092
2009-2010	STAT 244	T2	Elem. Stat. Concepts (taught w/ C.D. O'Shaughnessy)	LEC	83	39	3237

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YEAR	COURSE	Term	TITLE	INTR. TYPE	ENRL	YIH	YCSH
2009-2010	STAT 848	T2	Multivariate Data Analysis (grad reading course w/ W. Lavery)	READ	2	39	78
2009-2010	MATH 994	T1T2	Research (M.Sc. Co-Supervision)	RES	2		
2009-2010	MATH 996	T1T2	Research (Ph.D. Co-Supervision)	RES	1		
2008-2009	STAT 342	T1	Mathematical Statistics	LEC	19	39	741
2008-2009	STAT 848	T2	Multivariate Data Analysis	LEC	6	39	234
2007-2008	STAT 342	T1	Mathematical Statistics	LEC	7	39	273
2007-2008	STAT 846	T2	Computational Statistics	LEC	5	39	195

## 9.2 Unscheduled Instructional Activity

- Creating and assessing PhD qualifying exam on Mathematical Statistics for Hao Hu, July 2021.
- Creating and assessing PhD qualifying exam on Mathematical Statistics, May 2021.

## 9.3 Course and Program Development

- Renewal of the University of Saskatchewan Courses for SSC Accreditation, 2022-2023.
- Participated in creating new M.Sc. and Ph.D. programs in Statistics, approved on May 18, 2023.
- Participation in Creating Certificate in Statistical Methods, 2021.

## 9.4 Teaching Materials

- STAT 443/851: 273 pages of lecture notes were developed and posted to students.

## 9.5 Other Teaching-Related Activities

- Data Science Bootcamp, a case study, June 19, 2023.
- Peer evaluation for Saima Khosa, Dec. 2022.
- Peer evaluation for Raj Srinivasan, April 2023.
- Peer Teaching Evaluation for Shahedul Khan, Nov. 2021.
- Peer Teaching Evaluation for Li Xing, Nov. 2021.
- Peer Teaching Evaluation for Annalizer McGillvray, Nov. 29, 2019.
- Peer Teaching Evaluation for Shahedul Khan, 2017-2018.
- Peer Teaching Evaluation for Lawrence Chang, 2017-2018.
- Peer Teaching Evaluation for Shahedul Khan, STAT 812 , Nov. 12, 2020.

## 10. SUPERVISION AND ADVISORY ACTIVITIES

### 10.1 Undergraduate Student Supervision

- [15] Shruti Kaur, B.Sc., Computer Science and Statistics, May - Aug., 2025, Undergraduate Thesis Supervision, Supervised.
- [14] George Chen, B.Sc., Computer Science, Simon Fraser University, May 7, 2023 - Aug. 25, 2023, Supervised.

- [13] Noah Little, B.Sc., Anatomy and Cell Biology, April 2022 - Aug. 31, 2022, Supervised.
- [12] Noah Little, B.Sc., Anatomy and Cell Biology, Aug. 2020 - Feb. 2021, Supervised.
- [11] Lifang Lei, B.Sc., Mechanical Engineering, Oct. 2020 - March 2021, Supervised.
- [10] Yanping Li, B.Sc., Business, Edward Business School, Feb. 2021 - June 2021, Supervised.
- [9] Hao Hu, B.Sc., Statistics, 2019-2020, Undergraduate Thesis Supervision, Supervised.
- [8] Steven Liu, B.Sc., Computer Science, July 2019 - Oct. 2020, Summer Research Assistant, Supervised.
- [7] Lina Li, B.Sc., Statistics, May 2020 - June 2020, Summer Research Assistant, Supervised.
- [6] Steven Liu, B.Sc., Computer Science, June 17, 2019 - Aug. 31, 2019, Supervised.
- [5] Jian Su, B.Sc., Computer Science, May 1, 2018 - Aug. 31, 2018, Supervised.
- [4] Jiaqi Xiao, B.Sc., Economics, Research Assistant, May 2016 - Aug. 2016, Supervised.
- [3] Jiaqi Xiao, B.Sc., Economics, May 2015 - Aug. 2015, Supervised.
- [2] Zhouji Zhang, B.Sc., Mathematics, June 1, 2014 - June 30, 2014, Supervised.
- [1] Bei Zhang, B.Sc., Statistics, May 1, 2013 - Aug. 31, 2013, Supervised.

## 10.2 Graduate Student Supervision

- [27] Dananji Egodage, M.Sc., Statistics, Department of Mathematic and Statistics, 2023-2025, Co-supervised.
- [26] Jing Wang, Ph.D., Biostatistics, School of Public Health, 2023-2025, Co-supervised.
- [25] Wuqian Effie Gao, M.Sc., Biostatistics, School of Public Health, 2022-2024, Co-supervised.
- [24] Tingxuan Wu, Ph.D., Biostatistics, School of Public Health, Jan. 2019 - April 2023, Co-supervised.
- [23] Hao Hu, M.Sc., Statistics, Math & Stat, July 2022 - Sept. 2023, Co-supervised.
- [22] Hao Hu, Ph.D., Statistics, Math & Stat, 2021-2022, Transferred in July 2022, Co-supervised.
- [21] Hao Hu, M.Sc., Statistics, Math & Stat, 2021-2022, Transferred in Sept. 2021, Co-supervised.
- [20] Lina Li, M.Sc., Statistics, Math & Stat, 2020-2022, Project supervisor, Supervised.
- [19] Man Chen, M.Sc., Statistics, Math & Stat, July 2018 - April 2021, Supervised.
- [18] Mei Dong, M.Sc., Statistics, Math & Stat, 2017-2019, Co-supervised.
- [17] Tingxuan Wu, M.Sc., Biostatistics, School of Public Health, Jan. 2017 - Dec. 2018, Co-supervised.
- [16] Wutao Yin, Ph.D., Engineer, Biomedical Engineering, 2019-2022, Co-supervised.
- [15] Wutao Yin, Ph.D., Statistics, Math & Stats, 2018-2019, Transferred in May 2019, Supervised.
- [14] Xiaoying Wang, M.Sc., Statistics, Math & Stat, 2016-2019, Supervised.
- [13] Wei Bai, M.Sc., Statistics, Math & Stat, 2016-2018, Co-supervised.

- [12] Arash Shamloo, M.MATH., Statistics, Math & Stat, 2016-2018, Co-supervised.
- [11] Alireza Sadeghpour, M.Sc., Statistics, Math & Stat, May 2015 - 2017, Co-supervised.
- [10] Naorin Islam, M.Sc., Statistics, Math & Stat, 2014-2017, Co-supervised.
- [9] Yunyang Wang, M.Sc., Statistics, Math & Stat, 2014-2017, Supervised.
- [8] Setu Chandra Kar, M.Sc., Statistics, Math & Stat, 2015-2016, Supervised.
- [7] Arash Shamloo, M.Sc., Biostatistics, School of Public Health, 2015-2016, Co-supervised.
- [6] Shi Qiu, M.Sc., Statistics, Math & Stat, 2012-2015, Supervised.
- [5] Saima Khan Khosa, Ph.D., Statistics, Math & Stats, 2012 - April 2014, Supervised.
- [4] Masud Rana, M.Sc., Statistics, Math & Stats, 2010 - 2013, Co-supervised.
- [3] Zhengrong Li, M.Sc., Statistics, Math & Stats, 2008 - 2012, Supervised.
- [2] Lai Jiang, Ph.D., Statistics, Math & Stat, Jan. 2010 - 2016, Supervised.
- [1] Lai Jiang, M.Sc., Statistics, Math & Stats, 2008 - Dec. 2009, Supervised.

### 10.3 Graduate Theses Supervised

- [16] Effie Wuqian Gao, 2024, Z-residuals for Checking Bayesian Hurdle Models, M.Sc., defended on Aug. 30, 2024.
- [15] Tingxuan Wu, 2023, Residual Diagnostics and Statistical Inference for Shared Frailty Models, Ph.D., defended on May 24, 2023.
- [14] Hao Hu, 2022, Identifying Risk Factors for Cognitive Decline using Statistical Learning Techniques and Functional Data Analysis, M.Sc., defended on Sept. 15, 2022.
- [13] Wutao Yin, 2021, Artificial Intelligence Based Methods for Autism Spectrum Disorder Diagnosis from fMRI Data, Ph.D., defended on Dec. 17, 2021.
- [12] Man Chen, 2021, Association Between Gut Microbiome and Parkinson's Disease Revealed by Sparse Learning, M.Sc., defended on April 30, 2021.
- [11] Dong Mei, 2019, Feature Selection Bias in Assessing the Predictivity of SNPs for Alzheimer's Disease, M.Sc., defended on May 23, 2019.
- [10] Xiaoying Wang, 2019, Comparison of Statistical Testing and Predictive Analysis Methods for Feature Selection in Zero-inflated Microbiome Data, M.Sc., defended on March 12, 2019.
- [9] Tingxuan Wu, 2018, Randomized Survival Probability Residuals for Assessing Parametric Survival Models, M.Sc., defended on Dec. 4, 2018.
- [8] Wei Bai, 2018, Randomized Quantile Residual for Assessing Generalized Linear Mixed Models with Application to Zero-Inflated Microbiome Data, M.Sc., defended on July 12, 2018.
- [7] Yunyang Wang, 2016, Comparison of Stochastic Volatility Models Using Integrated Information Criteria, M.Sc., defended on Nov. 18, 2016.
- [6] Alireza Sadeghpour, 2016, Empirical Investigation of Randomized Quantile Residuals for Diagnosis of Non-Normal Regression Models, M.Sc., defended on Sept. 19, 2016.



- [5] Naorin Islam, 2016, Substance Abuse and Health: A Structural Equation Modeling Approach to Assess Latent Health Effects, M.Sc., defended on Nov. 28, 2016.
- [4] Lai Jiang, 2015, Fully Bayesian T-probit Regression with Heavy-tailed Priors for Selection in High-Dimensional Features with Grouping Structure, Ph.D., defended on Sept. 14, 2015.
- [3] Shi Qiu, 2015, Cross-validatory Model Comparison and Divergent Regions Detection using iIS and iWAIC for Disease Mapping, M.Sc., defended on March 26, 2015.
- [2] Masud Rana, 2012, Spatial-Longitudinal Bent-Cable Model with An Application to Atmospheric CFC Data, M.Sc., defended in Sept. 2012.
- [1] Zhengrong Li, 2012, A Non-MCMC Procedure for Fitting Dirichlet Process Mixture Models, M.Sc., defended in May 2012.

#### **10.4 Post-Doctoral Fellows and Research Associates**

- Tingxuan Wu, University of Saskatchewan, Jan. 2025 – June 2025.
- Tingxuan Wu, University of Saskatchewan, June 2023 – April 2024.
- Ming Ming Zhang, MITACS Postdoc, 2022-2025.
- Jinhong Shi, team-supervised for CFREF projects, 2016-2019.

#### **10.5 Staff Supervision**

- Saima Khosa, faculty mentoring, 2022-2023, T1

#### **10.6 Thesis Committee Memberships**

- [28] Han Wang, Cognate, Ph.D., Sociology, 2020-2025
- [27] Lina Li, Committee Member, Ph.D, Biostatistics, 2023-2025
- [26] Mangladeep Bhullar, Cognate, Ph.D., Physics & Engineering Physics, 2023-2025
- [25] Mohammad Toranjsimin, Committee Member, M.Sc., Biostatistics, 2023-2025
- [24] Kyle Gardiner, Committee Member, M.Sc., Statistics, 2023-2024. Thesis defended in Sept., 2024.
- [23] Hammed Jimoh, Member, M.Sc., Statistics, 2022-2023.
- [22] Matthew Schmirler, Member, Ph.D., Statistics, 2012-2022. Thesis defended July 21, 2022.
- [21] Qi Zhang, External Examiner, M.Sc., Sociology, 2021-2022.
- [20] Xiaolei Yu, Cognate, Ph.D., Geography, 2012-2022. Thesis defended in June 2022.
- [19] Yanzhao Cheng, Chair, Ph.D., Biostatistics, 2020-2022. Thesis defended in Oct. 2021.
- [18] Farhad Maleki, Cognate, Ph.D., Bioinformatics, 2014-2019.
- [17] Lingling Jin, Cognate, Ph.D., Bioinformatics, 2010-2018. Thesis defended Aug. 23, 2017.
- [16] Naeima Ashleik, Member, Ph.D., Statistics, 2017-2018. Thesis defended March 8, 2018.
- [15] Sanjeev Rijal, Member, M.Sc., Statistics, 2014-2018. Thesis defended July 6, 2017.

- [14] Saima Khan Khosa, Member, Ph.D., Statistics, 2014-2017.
- [13] Sudhakar Achath, Member, M.Sc., Statistics, 2014-2017. Thesis defended May 5, 2017.
- [12] Zhaoqin Li, Cognate, Ph.D., Geography, 2011-2017. Thesis defended April 24, 2017.
- [11] Mehdi Rostami Forooshani, Member, M.Sc., Biostatistics, 2014-2016. Thesis defended June 27, 2016.
- [10] Yue Dong, Member, M.Sc., Statistics, 2014-2016. Thesis defended June 2, 2016.
- [9] Temitope Adesina, Committee Chair, M.Sc., Biostatistics, 2014-2015.
- [8] Courtney Kendall, Member, M.Sc., Statistics, 2011-2014. Thesis defended Aug. 1, 2014.
- [7] Masha Naseri, Cognate, Ph.D., Provenance, 2012-2014. Thesis defended Feb. 2014.
- [6] Mohammed Obeidat, Member, Ph.D., Statistics, 2010-2014. Thesis defended July 10, 2014.
- [5] Weiwei Fan, Member, M.Sc., Bioinformatics, 2012-2014. Thesis defended Jan. 2014.
- [4] Chel Hee Lee, Member, Ph.D., Statistics, 2012-2013.
- [3] Matthew Schmirler, Member, M.Sc., Statistics, 2010-2013. Thesis defended Sept. 2012.
- [2] Michael Janzen, Cognate, Ph.D., Computer Science, 2011-2012. Thesis defended March 2012.
- [1] Tolulope Sajobi, Member, Ph.D., Discriminant Analysis, 2008-2012. Thesis defended March 2012.

## 11. BOOKS AND CHAPTERS IN BOOKS

### 11.1 Authored Books

- Soltanifar, M., Li, L., and Rosenthal, J., 2010. A Collection of Exercises in Advanced Probability Theory - the solutions manual of all even-numbered exercises from "A First Look at Rigorous Probability Theory", World Scientific Publishing, (Second Edition, 2006), Singapore.
- Li, L., 2007. Bayesian Classification and Regression with High Dimensional Features. (Ph.D. Thesis), Toronto: University of Toronto.

### 11.3 Chapters in Books

- Feng, C. X. and Li, L., 2016. Modeling Zero Inflation and Overdispersion in the Length of Hospital Stay for Patients with Ischaemic Heart Disease, in the book Advanced Statistical Methods in Big-Data Sciences, edited by D. Chen, J. Chen, X. Lu, G. Yi and H. Yu, Springer, Chapter 3, pp. 35-53.

## 12. PAPERS IN REFERRED JOURNALS

**2023-2024**

- [28] Wu, T., Feng, C., Li, L., 2024. Cross-validators Z-Residual for Diagnosing Shared Frailty Models. *The American Statistician*, 79(2), 198–211. <https://doi.org/10.1080/00031305.2024.2421370>



- [27] Feng, C., Li, L., Xu, C., 2023. Advancements in predicting and modeling rare event outcomes for enhanced decision-making. *BMC Medical Research Methodology* 23, Article 243 (pp. 1-3). <https://doi.org/10.1186/s12874-023-02060-x>

## 2021-2022

- [26] Yin, W., Li, L., Wu, F.-X., 2022. A semi-supervised autoencoder for autism disease diagnosis. *Neurocomputing*, 483, 140–147. <https://doi.org/10.1016/j.neucom.2022.02.017>
- [25] Cheng, H., Wang, W., Li, L., 2022. Determinants of Citizen Acceptance of White-Collar Crime in China. *Journal of Asian and African Studies*, 59(3), 826-843. <https://doi.org/10.1177/00219096221123742> (Published OnlineFirst; final pagination may vary.)
- [24] Yin, W., Li, L., Wu, F.-X., 2022. Corrigendum to “Deep learning for brain disorder diagnosis based on fMRI images, *Neurocomputing* 469 (2022) 332–345”. *Neurocomputing* 509, 271. <https://doi.org/10.1016/j.neucom.2022.08.074>
- [23] Yin, W., Li, L., Wu, F.-X., 2022. Deep learning for brain disorder diagnosis based on fMRI images. *Neurocomputing* 469, 332–345. <https://doi.org/10.1016/j.neucom.2020.05.113>

## 2020-2021

- [22] Bai, W., Dong, M., Li, L., Feng, C., Xu, W., 2021. Randomized quantile residuals for diagnosing zero-inflated generalized linear mixed models with applications to microbiome count data. *BMC Bioinformatics* 22, Article 564 (pp. 1-17). <https://doi.org/10.1186/s12859-021-04371-6>
- [21] Li, L., Wu, T., Feng, C., 2021. Model Diagnostics for Censored Regression via Randomized Survival Probabilities. *Statistics in Medicine* 40(6), 1482–1497. <https://doi.org/10.1002/sim.8852>
- [20] Dagasso, G., Yan, Y., Wang, L., Li, L., Kutcher, R., Zhang, W., Jin, L., 2021. Leveraging Machine Learning to Advance Genome-Wide Association Studies. *International Journal of Data Mining and Bioinformatics*, 25(1/2), 17–36. <https://doi.org/10.1504/ijdmb.2021.116881>

## 2019-2020

- [19] Dong, M., Li, L., Chen, M., Kusalik, A., Xu, W., 2020. Predictive analysis methods for human microbiome data with application to Parkinson's disease. *PLOS ONE* 15(8), e0237779 (pp. 1-20). <https://doi.org/10.1371/journal.pone.0237779>
- [18] Feng, C., Li, L., Sadeghpour, A., 2020. A comparison of residual diagnosis tools for diagnosing regression models for count data. *BMC Medical Research Methodology* 20, Article 175 (pp. 1-11). <https://doi.org/10.1186/s12874-020-01055-2>
- [17] Jiang, L., Greenwood, C.M.T., Yao, W., Li, L., 2020. Bayesian Hyper-LASSO Classification for Feature Selection with Application to Endometrial Cancer RNA-seq Data. *Scientific Reports* 10, Article 9747 (pp. 1-12). <https://doi.org/10.1038/s41598-020-66466-z>

## 2018-2019

- [16] Shi, J., Yan, Y., Links, M.G., Li, L., Dillon, J.-A.R., Horsch, M., Kusalik, A., 2019. Antimicrobial resistance genetic factor identification from whole-genome sequence data using deep feature selection. *BMC Bioinformatics* 20, Article 535 (pp. 1-14). <https://doi.org/10.1186/s12859-019-3054-4>

## 2017-2018

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- [15] Essien, S. K., Feng, C., Sun, W., Farag, M., Li, L., Gao, Y., 2018. Sleep duration and sleep disturbances in association with falls among the middle-aged and older adults in China: a population-based nationwide study. *BMC Geriatrics* 18, Article 196 (pp. 1-9). <https://doi.org/10.1186/s12877-018-0889-x>
  - [14] Li, L., Yao, W., 2018. Fully Bayesian Logistic Regression with Hyper-Lasso Priors for High-dimensional Feature Selection. *Journal of Statistical Computation and Simulation*, 88(14), 2827–2851. <https://doi.org/10.1080/00949655.2018.1490418>

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#### 2016-2017

- [13] Jin, L., McQuillan, I., Li, L., 2017. Computational Identification of Harmful Mutation Regions to the Activity of Transposable Elements. *BMC Genomics* 18, Article 862 (pp. 1-10). <https://doi.org/10.1186/s12864-017-4227-z>
- [12] Li, L., Feng, C.X., Qiu, S., 2017. Estimating Cross-validators Predictive P-values with Integrated Importance Sampling for Disease Mapping Models. *Statistics in Medicine*, 36(14), 2220–2236. <https://doi.org/10.1002/sim.7278>
- [11] Feng, C. X., Rostami, M., Li, L., 2017. Impact of Misspecified Residual Correlation Structure on the Parameter Estimates in a Shared Spatial Frailty Model. *Journal of Statistical Computation and Simulation*, 87(12), 2384–2410. <https://doi.org/10.1080/00949655.2017.1332196>

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#### 2015-2016

- [10] Li, L., Qiu, S., Zhang, B., Feng, C.X., 2016. Approximating Cross-validators Predictive Evaluation in Bayesian Latent Variables Models with Integrated IS and WAIC. *Statistics and Computing*, 26(4), 881–897. <https://doi.org/10.1007/s11222-015-9577-2>

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#### 2013-2014

- [9] Yao, W., Li, L., 2014. A New Regression Model: Modal Linear Regression. *Scandinavian Journal of Statistics*, 41(3), 656–671. <https://doi.org/10.1111/sjos.12054>
- [8] Yao, W., Li, L., 2014. Bayesian Mixture Labeling by Minimizing Deviance of Classification Probabilities to Reference Labels. *Journal of Statistical Computation and Simulation*, 84(2), 310–323.

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#### 2011-2012

- [7] Khan, S. A., Rana, M., Li, L., Dubin, J. A., 2012. A Comparative Case Study to Monitor and Understand Atmospheric CFC Decline with the Spatial-Longitudinal Bent-Cable Model. *International Journal of Statistics and Probability*, 1(2), 56–68.
- [6] Li, L., 2012. Bias-corrected Hierarchical Bayesian Classification with a Selected Subset of High-dimensional Features. *Journal of American Statistical Association*, 107(497), 120–134. <https://doi.org/10.1198/JASA.2011.AP10446>
- [5] Sajobi, T.T., Lix, L. M., Dansu, B. M., Laverty, W., Li, L., 2012. Robust Descriptive Discriminant Analysis for Repeated Measures Data. *Computational Statistics & Data Analysis*, 56(9), 2782–2794. <https://doi.org/10.1016/j.csda.2012.02.029>

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- [4] Sajobi, T. T., Lix, L. M., Li, L., Lavery, W., 2011. Discriminant Analysis for Repeated Measures Data: Effects of Mean and Covariance Misspecification on Bias and Error in Discriminant Function Coefficients. *Journal of Modern Applied Statistical Methods*, 10(2), 571–582. <https://doi.org/10.22237/jmasm/1320120840>

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- [3] Li, L., 2010. Are Bayesian Inferences Weak for Wasserman's Example? *Communications in Statistics – Simulation and Computation*, 39(4), 655–667. <https://doi.org/10.1080/03610910903576540>

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- [2] Li, L., Zhang, J., Neal, R.M., 2008. A method for avoiding bias from features selection with application to naive Bayes classification models. *Bayesian Analysis*, 3(1), 171–196. <https://doi.org/10.1214/08-BA307>
- [1] Li, L., Neal, R.M., 2008. Compressing Parameters in Bayesian High-order Models with Application to Logistic Sequence Models. *Bayesian Analysis*, 3(4), 793–822. <https://doi.org/10.1214/08-BA330>

### 13. REFERRED CONFERENCE PUBLICATIONS

- [3] Yin, W., Li, L., Wu, F.-X., 2021. A Graph Attention Neural Network for Diagnosing ASD with fMRI Data, in: 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). pp. 1131–1136. <https://doi.org/10.1109/BIBM52615.2021.9669849>
- [2] Dagasso, G., Yan, Y., Wang, L., Li, L., Kutcher, R., Zhang, W., Jin, L., 2020. Comprehensive-GWAS: a pipeline for genome-wide association studies utilizing cross-validation to assess the predictivity of genetic variations, in: 2020 IEEE International Conference on Bioinformatics and Biomedicine (BIBM). Presented at the 2020 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pp. 1361–1367. <https://doi.org/10.1109/BIBM49941.2020.9313355>
- [1] Jin, L., McQuillan, I., and Li, L., (2016), Computational Identification of Regions that Influence Activity of Transposable Elements in the Human Genome. Proceeding of 2016 IEEE International Conference on Bioinformatics and Biomedicine, pp. 592-599.

### 14. PRESENTATIONS

#### 14.1 Invited Presentations

- 2024-2025** – Li L., 2024, Z-residuals for Checking Bayesian Hurdle Models. Presented at: EcoStat 2024; July 17, 2024; Beijing, China.
- 2023-2024** – Li, L., 2024. Z-residual Diagnostic Tool for Assessing Covariate Functional Form in Proportional Hazards Models with Shared Frailty, ICSA Canada Chapter Symp., June 9, 2024, Niagara Falls, Canada
- Li, L., 2024. Z-residual Diagnostic Tool for Assessing Covariate Functional Form in Proportional Hazards Models with Shared Frailty, Annual Meeting of SSC, St John's, Canada, June 2, 2024

- Li, L., 2024. Z-residual Diagnostic Tool for Assessing Covariate Functional Form in Proportional Hazards Models with Shared Frailty, Dept. Seminar, Texas State University, USA, March 8, 2024
- Li, L., 2024. Z-residual Diagnostic Tool for Assessing Covariate Functional Form in Proportional Hazards Models with Shared Frailty, Dept. Seminar, Sun Yat-sen University, China, Jan. 4, 2024
- 2022-2023**
  - Li, L., 2023. Cross-validatory Residual Diagnostics for Bayesian Spatial Models, Annual Meeting of SSC, Ottawa, May 29, 2023
  - Li, L., 2022. Model Diagnostics for Censored Regression via Randomized Survival Probabilities, the 5th ICSA Canada Symposium, 9 July 2022, Banff, AB, Canada
  - Li, L., 2022. Model Diagnostics for Censored Regression via Randomized Survival Probabilities, 17 Aug. 2022, Statistics Conference in Genomics, Pharmaceutical Science, and Health Data Science, University of Victoria, Victoria, BC, Canada
- 2021-2022**
  - Li, L., 2022. Randomized quantile residuals for diagnosing zero-inflated generalized linear mixed models with applications to microbiome count data, SSC Annual Meeting (virtual), May 2022.
  - Li, L., 2021. Model Diagnostics for Censored Regression via Randomized Survival Probabilities, The 6th Canadian Conference in Applied Statistics, Hosted by Concordia University (virtual), 16 July 2021.
- 2019-2020**
  - Li, L., 2019. Estimating Cross-validatory Predictive P-values with Integrated Importance Sampling for Disease Mapping Models, Aug. 2019, the 4th ICSA-Canada Symposium held at Queen's University.
- 2018-2019**
  - Li, L., 2019. Feature Selection Bias in Assessing the Predictivity of SNPs for Alzheimer's Disease, June 2019, Seminar talk, University of Manitoba, Canada
- 2017-2018**
  - Li, L., 2018. Randomized Quantile Residuals for Checking GLMM with Application to Zero-inflated Microbiome Data, June 2018, Annual Meeting of Statistical Society of Canada, McGill University, Canada.
  - Li, L., 2017. Fully Bayesian Classification with Heavy-tailed Priors for Selection in High-Dimensional Features with Grouping Structure, Aug. 2017, the 3rd ICSA-Canada Symposium held at Vancouver.
- 2016-2017**
  - Li, L., 2017. Randomized Quantile Residuals: an Omnibus Model Diagnostic Tool with Unified Reference Distribution, June 2017, Seminar talk, School of Mathematical Sciences, Xiamen University, China.
  - Li, L., 2017. Fully Bayesian Classification with Heavy-tailed Priors for Selection in High-Dimensional Features with Grouping Structure, June 2017, Seminar talk, School of Mathematical Sciences, Xiamen University, China.
  - Li, L., 2017. Randomized Quantile Residuals: an Omnibus Model Diagnostic Tool with Unified Reference Distribution, June 2017, Seminar talk, Department of Biostatistics, Southern Medical University, Guangzhou, China.
  - Li, L., 2017. Estimating Cross-validatory Predictive P-values with Integrated Importance Sampling for Disease Mapping Models, June 2017, Annual Meet-

- ing of Statistical Society of Canada, University of Manitoba, Canada.
- Li, L. , 2016. Fully Bayesian Classification with Heavy-tailed Priors for Selection in High-Dimensional Features with Grouping Structure, Dec., 2016, Wuhan University, China.
- 2015-2016**
- Li, L. , 2016. Cross-validators Model Comparison and Divergent Regions Detection using iIS for Disease Mapping, Seminar of Dept of Math & Stat, University of Calgary, April 2016, Calgary, AB.
  - Li, L. , 2016. Cross-validators Model Comparison and Divergent Regions Detection using iIS for Disease Mapping, Seminar of Dept of Math & Stat, University of Alberta, Edmonton, AB.
  - Li, L. , 2016. Cross-validators Model Comparison and Divergent Regions Detection using iIS for Disease Mapping, Seminar of Department of Statistics, University of Manitoba, Jan. 2016, Winnipeg, MB.
  - Li, L. , 2015. Bias-corrected Hierarchical Bayesian Classification with a Selected Subset of High-dimensional Features, ICSA Canada Chapter Annual Meeting, University of Calgary, Aug. 2015, Calgary, AB.
- 2014-2015**
- Li, L. , 2014. Approximating Cross-validators Predictive Evaluation in Bayesian Latent Variables Models with Integrated IS and WAIC, Dec. 2014, Tongji University, Shanghai, China.
  - Li, L. , 2014. An Introduction to Microarray Data. Workshop on “Statistical Issues in Biomarker and Drug Co-development”, Nov. 2014, Fields Institute, Toronto, ON, Canada.
- 2013-2014**
- Li, L. , 2014, Approximating Cross-validators Predictive Evaluation in Bayesian Latent Variables Models with Integrated IS and WAIC. Statistics Seminar, April, Kansas State University, Manhattan, Kansas, USA.
- 2011-2012**
- Li, L., 2012. High-dimensional Feature Selection Using Hierarchical Bayesian Logistic Regression with Heavy-tailed Priors. CRM-ISM-GERAD Colloque de Statistique, April, McGill University, Montreal, Quebec, Canada.
- 2010-2011**
- Li, L., 2011. High-dimensional Classification using Hierarchical Bayesian Polychotomous Logistic Regression Models. Colloquia talk, Jan., The University of Western Ontario, London, ON, Canada.
  - Li, L., 2010. High-dimensional Classification using Hierarchical Bayesian Polychotomous Logistic Regression Models. Colloquia talk, Sept., Penn State University, University Park, PA, USA.
- 2007-2008**
- Li, L. , 2008. Avoiding Bias from Feature Selection. CRISM 'workshop on Bayesian Analysis of High-dimensional Data, April, University of Warwick, Coventry, UK.

## 14.2 Contributed Presentations

- [10] Li, L. , 2014. Approximating Cross-validators Predictive Evaluation in Bayesian Latent Variables Models with Integrated IS and WAIC. Annual Meeting of Statistical Society of Canada, May 27, 2014, Toronto, ON, Canada.
- [9] Li, L. , 2010. High-dimensional Classification using Hierarchical Bayesian Polychotomous Logistic

Regression Models. The 8th ICSA International Conference, Dec. 20, 2010, Guangzhou, China.

- [8] Sajobi, T., Lix, L., Lavery, W., and Li, L., 2010. Discriminant Analysis for Repeated Measures Data: Effects of Covariance Structure on Bias and Error in Discriminant Function Coefficients. Annual Meeting of Statistical Society of Canada, May 24, 2010, Quebec City, QC, Canada.
- [7] Li, L., 2010. Are Bayesian Inferences Weak for Wasserman's Example? Annual Meeting of Statistical Society of Canada, May 25, 2010, Quebec City, QC, Canada.
- [6] Li, L., 2009. "Calibrating Predictions Based on a Selected Subset of Features from Bayesian Gaussian Classification Models". Annual meeting of Statistical Society of Canada, Jan., Vancouver, BC, Canada.
- [5] Li, L., 2009. "Calibrating Predictions Based on a Selected Subset of Features from Bayesian Gaussian Classification Models". Bayesian Biostatistics Conference, Jan., Houston, TX, USA.
- [4] Li, L., 2008. "Compressing Parameters in Bayesian High-order Models". Annual Meeting of Statistical Society of Canada, May, Ottawa, ON, Canada.
- [3] Li, L., 2007. "Compressing Parameters in Bayesian Models with High-order Interactions". The 3rd Monte Carlo Workshop, Harvard University, May, Cambridge, MA, USA.
- [2] Li, L., 2006. "Avoiding Bias from Feature Selection in Regression and Classification Models". Joint Statistical Meeting, Aug., Seattle, WA, USA.
- [1] Li, L., 2006. "Analysis of Obstructive Sleep Apnea Data with Bayesian Neural Network". Annual Meeting of Statistical Society of Canada, June, London, ON, Canada.

## 15. REPORTS AND OTHER OUTPUTS

- [3] Wu, T., Feng, C., Li, L., 2023a. Cross-validators Z-Residual for Diagnosing Shared Frailty Models. <https://doi.org/10.48550/arXiv.2303.09616>. 19 journal pages.
- [2] Wu, T., Li, L., Feng, C., 2023b. Z-residual diagnostics for detecting misspecification of the functional form of covariates for shared frailty models. <https://doi.org/10.48550/arXiv.2302.09106>. 32 journal pages.
- [1] Li, L., Zhang, J., and Neal, R.M., 2007. A method for avoiding bias from features selection with application to naive Bayes classification models. Technical Report No 0705, Department of Statistics, University of Toronto.

## 17. RESEARCH FUNDING HISTORY

- [16] Co-Principal Investigator, 2024, Statistical Methodologies and Computational Tools to Identify Microbial Correlates of Canadian Bee Gut Health, Collaborative Research Team Projects – Project 29, 2025–2028.
- [15] Principal Investigator, 2022-2025, MITACS Accelerate Grant "Geospatial Artificial Intelligence Algorithms for Automating Manual Observation Associated with Wheat Production", \$280,000. 2021-2025.
- [14] Principal Investigator, 2020, MITACS Accelerate Grant: "Develop a web based geospatial artificial intelligence framework to track, visualize, analyze, model, and predict infectious disease spread in real-time", \$105,000, 2020-2021



- [13] Principal Investigator, 2019, NSERC Individual Discovery Grant, \$20,000/year. 2019-2025.
- [12] Co-investigator in a team of three professors, "Genome-wide diet-gene interaction analysis for risk of psychiatric comorbidity in inflammatory bowel disease", The Western Canadian Universities, Collaborative Project Seed Funding, Project team member: Pingzhao Hu (University of Manitoba) as the PI, Linglong Kong (University of Alberta) as another co-investigator, \$20,000. 2017-2019.
- [11] Investigator in a team with Prof. Kusalik as PI, 2016, Canada First Research Excellence Fund (CFREF) Project "Designing Crops for Global Food Security", sub-project entitled "Genotype & Environment to Phenotype", \$756,918, 2016-2019: 2016-2017, 2017-2018, 2017-2018, 2018-2019.
- [10] Principal Investigator, 2016, MITACS Accelerate Internship supporting research on "Applications of Neural Network Curve Fitting Methods for Least-squares Monte Carlo Simulations in Financial Risk Management", \$15,000, 2016. PI.
- [9] Principal Investigator, 2015. NSERC Individual Discovery Grant supporting research on "Bayesian Methods for High-Dimensional and Correlated Data", \$70,000, 2014–2019.
- [8] NSERC Individual Discovery Grant ECR Supplement, \$5,000/year for 2011-2014.
- [7] NSERC Individual Discovery Grant, \$80,000, 2009 - 2014 (\$16,000/year): 2009-2014.
- [6] CFI Leaders Opportunity Funding, \$160,000.
- [5] MITACS Accelerate Internship for my M. Sc. student, Zhengrong Li, \$15,000.
- [4] University of Saskatchewan President's Award, \$5,000.
- [3] College of Graduate Studies and Research at the University of Saskatchewan, \$15,000.
- [2] College of Arts and Science at the University of Saskatchewan as supplemental start-up operating grant, \$15,000.
- [1] University of Saskatchewan, as start-up operating grant, \$5,000.

## 18. PRACTICE OF PROFESSIONAL SKILLS

- |                  |   |
|------------------|---|
| <b>2023-2024</b> | <ul style="list-style-type: none"> <li>– Refereeing for <i>Journal of Computational and Graphical Statistics</i> (Sept. 2024)</li> <li>– Refereeing for <i>Journal of Applied Statistics</i> (Jan 2024)</li> <li>– External Examiner for the doctoral thesis by Yuping Yang at SFU (June 25, 2024)</li> <li>– Review an MITACS Accelerate Grant (Dec. 2023)</li> </ul>  |
| <b>2022-2023</b> | <ul style="list-style-type: none"> <li>– Refereeing for <i>Journal of Computational and Graphical Statistics</i> (Jan. 2023)</li> <li>– Refereeing for <i>Statistical Methods in Medical Research</i> (Aug. 2022, Jan. 2023, April 2023)</li> <li>– Refereeing for <i>Canadian Journal of Statistics</i> (July 2022)</li> <li>– External Examiner for the M.Sc thesis by Xiangling Ji, University of Victoria, 27 July 2022.</li> </ul> |



**2021-2022**

- Maintain a website that published real-time estimates of the reproduction rate ( $R_t$ ) of covid-19 for Canada and Canadian provinces: <https://longhaik.github.io/CanadaCovidRt/> (Sept. 2021-Feb. 2022). This project was supported by a MITACS grant.
- External Examiner for one NSERC IDG application.
- External Examiner for another NSERC IDG application.
- External Examiner for one MITACS Accelerate grant application.
- Organizer of an invited session for ICSA Canada Symposium 2022, Banff, AB, Canada
- Reviewer for a Canada Research Chair Position
- External M.Sc. Thesis Examiner for Zhongyuan Zhang, University of Toronto
- Refereeing for *Statistical Methods in Medical Research*
- Refereeing for *Journal of Statistical Computation and Simulation*
- Refereeing for *BMC Cancer*
- Refereeing for *Journal of Graphical and Computational Statistics*
- Refereeing for *Canadian Journal of Statistics*
- Refereeing for *IEEE Transactions on Neural Networks and Learning Systems*

**2020-2021**

- Update my package HTLR on CRAN to version 0.4 on 9 Sept. 2020.
- Grant refereeing for an application to MITACS Accelerate, May 2021.
- Grant refereeing for an application to NSERC IDG, Jan., 2021.
- External Examination for a PhD thesis of University of Montreal, May 2021.
- Refereeing for *Statistics in Medicine*
- Refereeing for *Computational Stat and Data Analysis*
- Refereeing for *Frontiers in Genetics*
- Refereeing for *Statistical Methods for Medical Research*
- Refereeing for *Journal of Statistical Computation and Simulation*
- Refereeing for *BMC Cancer*

**2019-2020**

- Li, L. and Liu, S. (2020), HTLR: Bayesian Logistic Regression with Hyper-LASSO priors, an R package submitted to CRAN in Oct. 2019.
- Refereeing for *Computational Stat and Data Analysis*
- Refereeing for *Frontiers in Genetics*
- Refereeing for *Communications in Statistics - Simulation and Computation*
- External doctoral thesis examiner for Shijia Wang, Simon Fraser University.
- External doctoral thesis examiner for Kexin Luo, Western University.
- Grant Refereeing for an application to MITACS
- Grant Refereeing for an application to NSERC IDG

**2017-2018**

- Refereeing for *Canadian Journal of Statistics*

- Refereeing for *Journal of Royal Statistical Society (C)*
  - Referee a NSERC discovery grant application.
  - An R add-on package HTLR, Bayesian Logistic Regression with Hyper-LASSO priors, publicly released through Longhai Li's website on May 16, 2018.
- 2016-2017**
- Refereeing for *Statistics in Medicine*
  - Refereeing for *Statistics and Computing*
  - Refereeing for *PLOS ONE*
  - Referee two applications for MITACS Accelerate Grant
  - Li, L. (2016), R code for computing predictive p-values in disease mapping models. Publicly released R code for demonstrating the method introduced in the paper Li, et al. (2017) *Statistics in Medicine*.
- 2015-2016**
- Refereeing application for the following grant: NSERC individual discovery grant (2015).
  - Organizer, An invited session entitle “Recent Advances in Statistical Inference Methods in Regression Models for Complex and Big Data” for China Statistics Conference, June, 2016, Qingdao, China.
- 2013-2014**
- Refereeing for *Biometrika*
  - Refereeing for *Statistics In Medicine*
  - Refereeing for *Statistical Papers*
  - Refereeing for *Computational Statistics*
  - Refereeing for *Statistica Sinica*
  - Reviewing and revision services for an SHRF Establishment Grant application: “Supporting and Engaging Professionals in Palliative Care: Designing a Professional Quality of Life Intervention for Nurses in Rural and Urban Practice Settings”, which was led by Prof. Kelly Penz at the College of Nursing of the University of Saskatchewan. The application was funded by SHRF (2013).
- 2011-2012**
- Refereeing application for the following grant: NSERC individual discovery grant (2011).
  - R add-on packages released through CRAN: Li, L. (2011), Bias-corrected Bayesian Classification with Selected Features. (994 source lines). First version released on 27 July 2011. This package is for the method reported in Li (2012), now collected under task view "Bayesian".
- 2010-2011**
- R add-on Packages Released Through CRAN: Li, L. (2011), Bias-corrected Bayesian Classification with Selected Features. (994 source lines) . First version released on 27 July 2011. This package is for the method described in Li (2011+), now collected under task view "Bayesian".
- 2007-2008**
- R add-on Packages Released Through CRAN: Li, L. (2008), Bayesian Prediction with High-order Interactions. (2872 source lines). First version released on 21 Feb. 2008. This package is for the method described in Li and Neal (2008), now collected under CRAN task views "Bayesian" and "Machine Learning".

- Li, L. (2008), Naive Gibbs Sampling with Metropolis Steps. (108 source lines). First version released on 24 March 2008. This package provides a routine function for sampling an arbitrary continuous distribution.
- Li, L. (2007), Classification Rule Based on Bayesian Naive Bayes Models with Features Selection Bias Corrected. (653 source lines). First version released on 8 Nov. 2007. This package is for the method described in Li, Zhang and Neal (2008), now collected under CRAN task views "Bayesian", "Machine Learning" and "Multivariate".
- Li, L. (2007), Classification rule based on Bayesian mixture models with feature selection bias corrected. (756 source lines). First version released on 11 Nov. 2007. This package is for a method (which hasn't been submitted for publication) described in my thesis (Li, 2007), now collected under CRAN task view "Bayesian".

## 19. ADMINISTRATIVE SERVICE

### 19.1 University Committees

<b>2024-2025</b>	– Member of NSERC Discovery Grant EG 1508 Committee
<b>2023-2024</b>	– Member of NSERC Discovery Grant EG 1508 Committee
<b>2022-2023</b>	– Member of NSERC Discovery Grant EG 1508 Committee
	– Co-editor for a special issue "Prediction Methods for Rare Diseases or Outcomes" in the journal BMC Medical Research Methodology
<b>2021-2022</b>	– Member, CANSSI-SK Health Research Collaborating Center. Participate Substantially in organizing a semester-long seminar series
<b>2019-2020</b>	– Program Committee Member for the 4th ICSA-Canada Symposium, Queens University (Aug. 2019)
<b>2017-2018</b>	– Co-chair of the scientific program, the 3rd ICSA Canada Chapter Symposium held in Vancouver (Aug. 2017)
<b>2016-2017</b>	– Judge for case study competition, Annual Meeting of Statistical Society of Canada (June 2017)

### 19.2 College and Departmental Committees

#### College

<b>2016-2017</b>	– Member, Sub Search Committee for a joint position in “data science/big data”, College of Arts and Science, University of Saskatchewan
<b>2014-2015</b>	– Member, Academic Program Committee, College of Arts and Science

#### Department

<b>2024-2025</b>	– Member, Graduate Program Committee in Statistics, Dept of Math & Stat
	– Search subcommittee for a faculty position in statistics
<b>2023-2024</b>	– Member, Graduate Program Committee in Statistics, Dept of Math & Stat
	– Member, Sub Search Committee, 4-Year Lecturer Position

- 2022-2023**
- Statistics Advisor (credit transferring for the whole university)
  - Member, Department Promotion (Associate) Committee (1-Case), Dept of Math & Stat
  - Member, Department Renewals and Tenure Committee (1-Case: Tenure), Dept of Math & Stat
  - Member, Department Promotion (Full) Committee (1-Case), Dept of Math & Stat
- 2021-2022**
- Statistics Advisor (credit transferring for the whole university)
  - Member, Department Renewals and Tenure Committee (1-Case), Dept of Math & Stat
  - Member, Department Promotion (Full) Committee (1-Case), Dept of Math & Stat
  - Search subcommittee for a 4-year term lecturer position (two rounds of searching, Jan 2021-June 2022)
- 2020-2021**
- Search subcommittee for a 4-year term lecturer position (two rounds of searching, Jan 2021-June 2022)
- 2019-2020**
- Member, Tenure Committee (1 case), Dept of Math & Stat
  - Member, Promotion Committee (1 case), Dept of Math & Stat
  - Member, Renewal of Probation Committee (1 case), Dept of Math & Stat
  - Member, Graduate Committee, Dept of Math & Stat
  - Organizer, Team discussion towards renovating undergraduate statistics program, Dept of Math & Stat
- 2018-2019**
- Committee Member, Data Science Boot Camp, University of Saskatchewan (June 10–21, 2019)
  - Member, Curriculum Renewal Committee, Dept of Math & Stat, Term 1
  - Member, Undergraduate Committee, Dept of Math & Stat, Term 1
- 2017-2018**
- Member, Salary Review Committee, Dept of Math & Stat, University of Saskatchewan
  - Member, Search Committee, Dept of Math & Stat, University of Saskatchewan
- 2016-2017**
- Member, Graduate Committee, Dept of Math & Stat
  - Member, Sub Search Committee, APA position, Dept of Math & Stat, University of Saskatchewan
  - Member, Sub Search Committee, 4 lecturer positions, Dept of Math & Stat, University of Saskatchewan
  - Organizer, Statistics and Probability Alumni Networking Day (Nov. 2016)
  - Organizer, Qualifying Exams for Trisha Lawrence (Nov., 2016)
- 2015-2016**
- Member, Graduate Committee, Dept of Math & Stat
  - Organizer, Student Seminar Day, Dept of Math & Stat (May, 2016)
  - Team leader, submission of U of S courses for accreditation by the Statistical Society of Canada (May, 2016)

- Organizer, Qualifying Exams for Trisha Lawrence (May, 2016)
- 2014-2015**
  - Member, Graduate Committee, Dept of Math & Stat
  - Organizer, Seminar Series, Dept of Math & Stat
- 2012-2013**
  - Member, Curriculum Renewal Committee, Dept of Math & Stat
  - Member, Budget Planning Committee, Dept of Math & Stat
  - Member, Colloquium Committee, Dept of Math & Stat
- 2011-2012**
  - Member, Salary Review Committee, Dept of Math & Stat, University of Saskatchewan
  - Organizer, Seminar Series, Dept of Math & Stat
  - Member, Colloquium Committee, Dept of Math & Stat
- 2009-2010**
  - Member, Sub Search Committee, Dept of Math & Stat

## **20. PROFESSIONAL OR ASSOCIATION OFFICES AND COMMITTEE ACTIVITY**

- 2024-2025**
  - Member of NSERC Discovery Grant EG 1508 Committee
  - Local Organizing Committee, 2025 Annual Meeting of the Statistical Society of Canada held at the U of S
- 2023-2024**
  - Member of NSERC Discovery Grant EG 1508 Committee
- 2022-2023**
  - Member of NSERC Discovery Grant EG 1508 Committee
  - Co-editor for a special issue "Prediction Methods for Rare Diseases or Outcomes" in the journal BMC Medical Research Methodology
- 2021-2022**
  - Member, CANSSI-SK Health Research Collaborating Center. Participate Substantially in organizing a semester-long seminar series
- 2019-2020**
  - Program Committee Member for the 4th ICSA-Canada Symposium, Queens University (Aug. 2019)
- 2017-2018**
  - Co-chair of the scientific program, the 3rd ICSA Canada Chapter Symposium held in Vancouver (Aug. 2017)
- 2016-2017**
  - Judge for case study competition, Annual Meeting of Statistical Society of Canada (June 2017)