# YAFEI WANG

Contact Information	Mathematical and Statistical Sciences University of Alberta 111 St. NW T6G 1H7	(+1) 587-937-5988 vafej2@ualberta.ca	
Education	College of Applied Sciences, Beijing University of Technology, Beijing, China		
	<ul> <li>Ph.D., Statistics, 2013-2019</li> <li>Thesis Topic: Estimation for Several Functional Advisor: Zhongzhan ZHANG, Ph.D</li> </ul>	Models	
	School of Mathematics and Information Science, Weifang University, Weifang, China		
	<b>B.S.</b> , <b>Statistics</b> , 2009-2013		
Research Interests	<ul> <li>Complex and Structured Massive Data Analysis</li> <li>Functional data analysis Functional linear regression; Independence test; Mo- involving functional objects, e.g. brain imaging data.</li> <li>Robust statistics Varying coefficient model for functional response; Functional Statistical Optimization in Data Science</li> <li>Operator splitting schemes</li> <li>(Distributional) Reinforcement learning</li> </ul>	del-based design; Applications , DTI data ctional linear quantile regression	
Professional Experience	<ul> <li>Postdoctoral Research Fellow</li> <li>Department of Mathematical and Statistical Sciences</li> <li>University of Alberta</li> <li>Supervisor: Linglong KONG, Ph.D; Bei JIANG, Ph.</li> </ul>	Nov 2019 to current s,	
	<ul> <li>Visiting Ph.D. Student</li> <li>Department of Mathematical and Statistical Sciences</li> <li>University of Alberta</li> <li>Advisor: Linglong KONG, Ph.D; Bei JIANG, Ph.D</li> </ul>	Oct 2017 to Oct 2018 s,	
Teaching Experience	<ul><li>Graduate Courses Taught</li><li>• STAT 580 Stochastic Processes</li></ul>	2020, Fall	
Published Papers	<ol> <li>Tingyu Lai, Zhongzhan Zhang and Yafei Wang (2021). A kernel-based measure for conditional mean dependence. <u>Computational Statistics &amp; Data Analysis</u>, 160:Article 107246. DOI: 10.1016/j.csda.2021.107246</li> </ol>		
	<ol> <li>Tingyu Lai, Zhongzhan Zhang, Yafei Wang and Linglong Kong (2020). Testing independence of functional variables by angle covariance. <u>Journal of Multivariate Analysis</u>, 182:Article 104711. DOI: 10.1016/j.jmva.2020.104711</li> </ol>		
	<ol> <li>Tong Su, Yafei Wang, Yi Liu, William G. Branton, Eugene Asahchop, Christopher Power, Bei Jiang, Linglong Kong and Niansheng Tang (2020). Sparse multicategory generalized distance weighted discrimination in ultra-high dimensions. <u>Entropy</u>, 22(11):1-33. DOI: 10.3390/e22111257</li> </ol>		
	<ol> <li>Tingyu Lai, Zhongzhan Zhang and Yafei Wang (2020). Testing independence and goodness-of-fit jointly for functional linear models. Journal of the Korean Statistical Society, 1-23. DOI: 10.1007/s42952-020-00083-4</li> </ol>		

- 5. Yafei Wang, Linglong Kong, Bei Jiang, Xingcai Zhou, Shimei Yu, Li Zhang and Giseon Heo (2019). Wavelet-based lasso in functional linear quantile regression. *Journal of Statistical Computation and Simulation*, 89(6): 1111–1130. DOI: 10.1080/00949655.2019.1583228
- Yafei Wang, Tianfa Xie and Zhongzhan Zhang (2018). Partial functional linear models with ARCH errors. <u>Open Journal of Statistics</u>, 08(2):345–361. DOI: 10.4236/ojs.2018.82023
- Yafei Wang, Jiang Du and Zhongzhan Zhang (2017). Partial functional linear model with dependent errors. <u>Acta Mathematicae Applicatae Sinica</u>, 40(1):49-65 (In Chinese). URL: http://123.57.41.99/jweb\_yysxxb/EN/Y2017/V40/I1/49

## PRESENTATIONS Invited Talk

• Estimation of functional linear model with incomplete observations, *The 4th ICSA-Canada Chapter Symposium–Advances and Innovations in Statistics and Data Science*, Queen's University, Kingston, Ontario, Canada. Aug 9-11, 2019

#### **Contributed Talk**

- Estimation of functional linear model with incomplete observations, *The Fourth National Forum on Statistics of Postgraduates in Colleges and Universities*, Beijing, China. Nov 24, 2018
- M-estimators on varying coefficient model with functional response in reproducing kernel Hilbert space, *The 3rd National Forum for Doctoral Students in Statistics in 2018*, Guangzhou, China. Nov 2-4, 2018
- Partial functional linear models with ARCH errors, *The 11th International Student* Conference on Advanced Science and Technology, Kumamoto, Japan. Dec8-9, 2016
- Partial functional linear models with ARCH errors, *Guangdong Postgraduate Forum* — *Social Economic and Statistics Forum*, Guangzhou, China. Oct 22-23, 2016

#### **Contributed Poster**

- Detecting characteristics of TED talks predicting their popularity: A TED talks feature analysis, *Statistical Society of Canada*, Montreal, Canada. June 3-6, 2018
- Partial functional linear models with ARCH errors, *IMS-China International Conference* on Statistics and Probability, Guangxi, China. June 28-July 1, 2017

Honors and	• Second Prize of Paper Award in the 3rd National Forum for Doctoral Stu		
Awards	Statistics, Guangzhou, China.	2018	
	<ul> <li>Science Graduate Scholarship, 6000 CNY.</li> <li>ICAST Speech and Host Certificate, Kumamoto, Japan.</li> </ul>		
	• Second Rank for Graduate Student Scholarship, Beijing University of Technology,		
	Beijing, China.	2014	
	• Excellent Graduates in Weifang, Weifang University, Weifang, China.	2013	
	<ul> <li>National Encouragement Scholarship, Weifang University, Weifang, China.</li> <li>Schools first scholarship, Weifang University, Weifang, China.</li> <li>Merit student, Weifang University, Weifang, China.</li> </ul>		
	• National Encouragement Scholarship, Weifang University, Weifang, China.		
	• Merit student, Weifang University, Weifang, China.	2010	
Academic	• Referee for <i>Canadian Journal of Statistics</i> , 2020 (two papers).		
SERVICES	• Referee for Journal of Statistical Computation and Simulation, 2020 (two papers)		
	• Referee for <i>Computational Statistics and Data Analysis</i> , 2019 (one paper)		
	• Referee for Journal of Business & Economic Statistics, 2019 (one paper)		

### PRACTICES

- Volunteer for the Western North American Region of The International Biometric Society(WNAR), Edmonton, Canada. 2018
- The invited speaker of the graduate forum of Beijing, Tianjin and Hebei, Beijing, China. 2017
- The invited speaker of the Academic Salon from "Paper Writing" to "Academic Frontier" of "Scientific Spirit and Academic Norms" in Beijing University of Technology, Beijing, China. 2016