Meng Xu

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Profile

- Solid statistical background with demonstrated analytical and quantitative skills
- Expertise in programming languages mainly in R, MATLAB and SPSS (Entry level: SAS, C)
- 5+ years of experience in statistical modelling, inference and complex data analysis in Financial/Bio-statistics
- Data analyst/researcher with excellent communication, strong team skills and passion for challenges

Core Quant Skills: Functional Data Analysis, Multivariate Regression, Panel Data Analysis, Hypothesis Testing, Semi/Non-parametric Regression, Bootstrap, Cross Validation, Backfitting, CVaR/VaR, Parallel Computing, etc.

Professional Experience

10/2018 – present, Postdoctoral Fellow, Department of Statistics, University of Haifa, Israel
Mentor: Philip Tzvi Reiss
Current projects: Evaluation and measures on data reliability; hypothesis test of difference on distributions; analysis and modeling on fMRI, fNIRs and behavioral data

10/2016 – 08/2017, Visiting Ph.D. Researcher, University of Granada, Spain
Supervised by Jose Miguel Angulo; Sponsor: Erasmus +

10/2014 – 10/2015, Joint Ph.D. Trainee, National University of Singapore
Supervised by Jialiang Li; Sponsor: China Scholarship Council

04/2014 – 10/2014, Visiting Ph.D. Trainee, University of Göttingen, Germany
Supervised by Helmut Herwartz; Sponsor: Erasmus Mundus Action 2

Education

2018, Doctor of Economics in Statistics, Sichuan University, China
Dissertation: *Study on the Factors of Asset Price via Functional Data Analysis.*
Degree conferred on Sep. 25, 2019

2011-2013, Graduate study (M.A level) in Finance, Sichuan University, China

2011, B.S. in Mathematics, Sichuan University, China

Publication

Meng Xu, Philip Reiss. (2020) Distribution-free pointwise adjusted p-values for functional hypotheses. Preprint.

Meng Xu, Philip Reiss, Ivor Cribben. (2020) Generalized reliability based on distances. Major revision for *Biometrics.*

Philip Reiss, Meng Xu. (2020) Tensor product splines and functional principal components. *Journal of Statistical Planning and Inference*. Accepted. [Link]

Meng Xu., Jose M. Angulo. (2019) Divergence-based risk measures: a discussion on the sensitivities and extensions. *Entropy*. [doi]

Meng Xu, Jialiang Li, Ying Chen. (2017). Varying coefficient functional autoregressive model with application to the U.S. treasuries. *Journal of Multivariate Analysis*. [doi]

Meng Xu, Zhuyu Li, Taiji Wang. (2012). Study on the comparative analysis of the FDLR model and its nonlinear improvement in the interval finance yield series. *Soft Science*, in Chinese with English abstract. [doi]

Meng Xu, Tiande Li. (2012). Study on the semi-parametric models for Engel Curve of traffic and communication. *Statistics and Decision*, in Chinese with English abstract. [doi]

Meng Xu et. al. (2010) A new optimization model for simulation robot collision behaviors. *Journal of Harbin Institute of Technology (New Series)*. [EID]

R-package: dbicc, DVDtest (https://github.com/wtagr)

Conference

(Pres.) Generalized reliability based on distances. UH-UCY (University of Cyprus) Workshop in Statistics, Haifa, Israel. Nov. 12, 2019.

(Contributed Pres.) Generalized test-retest reliability based on distances. Annual Meeting of the Israel Statistical Association. Bar-Ilan University, Israel. June 6, 2019.

(Contributed Pres.) Divergence-based Risk Measures: A Discussion on the Sensitivities and Extensions. Jerusalem Joint Statistical Event 2018: 10th Conference of the Eastern Mediterranean Region of the International Biometrics Society (EMR -- IBS). Jerusalem, Israel. Dec. 17 – 20, 2018

(Contributed Pres.) Divergence-based Risk Measures: A Discussion on the Sensitivities and Extensions. Joint Statistical Meetings, Vancouver, Canada. Jul. 28 – Aug. 2, 2018

(Poster) Time-Varying Coefficient Functional Autoregressive Model and its application to U.S. Treasuries. Asian Regional Section of the International Association for Statistical Computing ARS-IASC Conference. Singapore. Dec 17 – 19, 2015

Other Professional Experience

10/2017 – 06/2018, R.A., Business School, Sichuan University, China

Participant in General Project *Air Pollution and Tourism: Sustainable development of Tourism based on the System of Air Pollution-Tourism-Economic Model*, sponsored by NNSFC (PI: Ying Li, No.71773082, Jan.2018-Dec.2021)

- Participated in completing the application declaration
- Constructed the statistical model (Time Varying Spatial Autoregressive Model; TV-SAR) for considering the interactions of cities and other factors on the tourism industry

10/2011 – 06/2018, R.A., School of Economics, Sichuan University, China

Participant in a series of national or provincial level of academic projects and governmental/enterprise programs hosted by supervisor Tiande Li or other professors in the research team.

- Developed the Early-warning assessment Model, participating in Key Project *Overseas Petroleum Resources Replacement Strategy based on the Perspective of Chinese Petroleum Security*, sponsored by NSSFC, Jan.2012-present
- Application of risk models, participating in the enterprise consulting project *A Systematically Financing Plan for Mineral Resources of Tibet*, sponsored by China Development Bank, 2013
- Reviewed works on the housing price model, participating in the project *Study on the Formation and Transmission Mechanism of Bubbles in the Housing Market----based on the OLG Model*, sponsored by Committee of Researched on the Generalized Virtual Economy, China, Sept.2012-Sept.2013
- Data collection & analysis in R, and writing organizer, in the project *Program on the Contemporary Situation, Problems and Advice of Housing market for Sichuan Province*, Apr.2012-Jun.2012
- Modified and rechecked the model, for Prof. Tiande Li's book *The Theory of Global Economical Fluctuation* (*Global Economic Cyclical and Non-cyclical Fluctuations and the Construction of the Warning Mechanism of China's Economy*, Major Project of NSSFC), Oct.2011-Aug.2012

09/2011, R.A., School of Mathematics, Sichuan University, China

Participant in the project on the experiment of multicultural decisive behaviors between German and Chinese students, collaborated with University of Bonn, Germany; Advisor: Prof. Zhuyu Li

- Data analysis of fuzzy survey in R and SPSS

Intern & Volunteer

Examiner Member. Evaluation Committee of China Scholarship Council in Israel. 2019

Stipend Assistant, Centre for European Studies, Sichuan University. 2011 – 2012 & 2015 – 2016

Summer Intern (Lobby Manager), Bank of China, Chengdu. Aug. 2012

Founder & President, Mathematics Fan Association of Sichuan University. 2009 – 2010

Award

National Scholarship for Graduate Students issued by the Ministry of Education, P.R. China, 2012 & 2013