Fenghui Yu

Address HG F 42.1, RiskLab, Email maggie.yufenghui@gmail.com

Department of Mathematics, Tel. +44 7879 005096

ETH Zurich, Website http://fenghuiyu.github.io

8092, Zurich, Switzerland. Birth Date December 20, 1992

Position

Jun 2019-Present Postdoctoral Researcher

- RiskLab and Department of Mathematics, ETH, Zurich, Switzerland

Sept 2018-May 2019Postdoctoral Fellow

- Department of Mathematics, The University of Hong Kong, Hong Kong

Education

Sept 2014-Aug 2018Ph.D., Mathematics - The University of Hong Kong, Hong Kong

Research Field: Mathematical and Computational Finance

Supervisor: Prof. Wai-Ki CHING

Thesis: On Pricing, Hedging and Trading in Financial Management

Sept 2010-Jul 2014 B.S. Mathematics; B.E. Finance (Double Degree) - Jilin University, China

Major: Computational Mathematics; Minor: Finance and Financial Management

Performance: Outstanding Class (top 5%)

Research Interests

- Quantitative Methods in Finance, Risk Management and Actuarial Science
- · Applied Probability, Stochastic Modeling and Optimal Stochastic Control
- Machine Learning, Data-driven Innovation and their Applications

Honors and Awards

2018	Scientific Research Network (WOG) Grant - Research Foundation Flanders (FWO), Belgium
2016, 2018	Conference Grant for Research Postgraduate Students
	- The University of Hong Kong, Hong Kong
2016	SIAM Student Travel Award - SIAM, USA
2016	Doris Chen Postgraduate Travel Grant - The University of Hong Kong, Hong Kong
2016	International Student Travel Award - PIMS, Canada
2014-2018	HKU Foundation Postgraduate Fellowship - The University of Hong Kong, Hong Kong
2014-2018	Postgraduate Scholarship - The University of Hong Kong, Hong Kong
2012-2014	First Rank Scholarship - Jilin University, China
2011-2014	Outstanding Undergraduate - Jilin University, China
2011	Second Rank Scholarship - Jilin University, China

Papers

• **Feng-Hui Yu**, Wai-Ki Ching, Jia-Wen Gu and Tak-Kuen Siu. *Interacting Default Intensity with Hidden Markov Process*. Quantitative Finance, 7(5), 781-794, 2017.

- Feng-Hui Yu, Jie-Jun Lu, Jia-Wen Gu and Wai-Ki Ching. *Modeling Credit Risk with Hidden Markov Default Intensity*. Computational Economics, 54(3), 1213-1229, 2019.
- Dong-Mei Zhu, Jia-Wen Gu, **Feng-Hui Yu**, Wai-Ki Ching and Tak-Kuen Siu. *On Pricing and Hedging Basket Credit Derivatives with Dependent Structure*. Revision submitted to IMA Journal of Management Mathematics, 2019.
- Dong-Mei Zhu, Jia-Wen Gu, **Feng-Hui Yu**, Tak-Kuen Siu and Wai-Ki Ching. *Optimal Pairs Trading with Dynamic Mean-Variance*. Preprint, 2017.
- Tak-Kuen Siu, **Feng-Hui Yu**, Qing-Qing Yang, Jia-Wen Gu and Wai-Ki Ching. *Pricing Participating Policies Under Hidden Markov Models via Neural Networks*. Preprint, 2019.
- Feng-Hui Yu, Wai-Ki Ching, Jia-Wen Gu and Chu-Fang Wu. *Optimal Mean-Variance Pairs Trading Strategies*. Preprint, 2019.
- Feng-Hui Yu, Wai-Ki Ching, Tak-Kuen Siu. *Multi-Period Optimal Mean-reverting Spread Trading Strategies with Hidden Markovian Regime Switching*. In preparation.

Conference/Workshop/Research Experience

Dec 2019	Invited talk, Youth Probability and Statistic Forum - Beijing, China
Dec 2019	Invited talk, Post/Doctoral Seminar in Mathematical Finance - ETH Zurich, Switzerland
Feb 2018	Contributed poster , Actuarial and Financial Mathematics Conference: Interplay between Finance and Insurance - Brussels, Belgium
Feb 2018	Contributed talk, Workshop on Computational Science and Optimization - Hong Kong
Nov 2016	Contributed talk , SIAM Conference on Financial Mathematics and Engineering - Austin, Texas, USA
Jul 2016	Contributed talk, The Sixth International IMS-FIPS Workshop - Edmonton, Canada
Jun 2016	Contributed talk, The 11th East Asia SIAM Conference - Macao
May 2016	Participant, International Conference on Applied Mathematics - Hong Kong
Feb 2016	Contributed talk, The Fourth Asian Quantitative Finance Conference - Osaka, Japan
Aug 2015	Academic Visit , Department of Mathematical Sciences, University of Copenhagen - Copenhagen, Denmark
2013-2014	Student Researcher, College Base Program - Jilin University, China
2012-2013	Group Leader , College Student Innovation Research Training Program - Jilin University, China
Jan-Feb 2013	Intern, Agricultural Bank of China, Changde Branch - Changde, China
Aug 2012	Analyst, Mathematics Contest in Modeling - China

Other Scientific Activities

Jun-Jul 2016	PIMS Summer School in Mathematical Finance - University of Alberta, Canada
Jul 2014	International Summer School on Scientific Computing - Chinese Academy of Sciences, China
Jul 2014	Summer School on Applied Mathematics - Peking University, China
Jul 2013	Summer Program for Advanced Interdisciplinary Studies - Peking University, China
Jul 2013	Annual Conference held by Academy for Advanced Interdisciplinary Studies - Peking University, China
Jul 2013	Summer Study Camp for Mathematics - Fudan University, China

Teaching Experience

(All of the courses are given in English)

Sep-Nov 2017 Teaching Assistant, Department of Mathematics,

- The University of Hong Kong, Hong Kong

Course: Discrete Mathematics

Sep-Nov 2017 Teaching Assistant, Department of Mathematics,

Sep-Nov 2016 - The University of Hong Kong, Hong Kong

Sep-Nov 2015 Course: University Mathematics I

Jan-May 2015 Teaching Assistant, Department of Mathematics,

- The University of Hong Kong, Hong Kong

Course: Computational Methods and Differential Equations with Applications

Additional Information

Jan 2015 Certificate of Teaching and Learning in Higher Education

- The University of Hong Kong, Hong Kong

Programming MATLAB, Python, Pandas

Referees

Prof. Wai-Ki CHING

Department of Mathematics, The University of Hong Kong, Hong Kong. Email: wching@hku.hk

Prof. Tak-Kuen SIU

Department of Actuarial Studies and Center for Financial Risk, Faculty of Business and Economics, Macquarie University, Sydney, NSW 2109, Australia. Email: ktksiu2005@gmail.com

Prof. Dongmei ZHU

School of Economics and Management, Southeast University, China. Email: zhudongmei@seu.edu.cn

Prof. Guangyue HAN (address teaching)

Department of Mathematics, The University of Hong Kong, Hong Kong. Email: ghan@hku.hk