Fenghui Yu

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The University of Hong Kong,
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Education

Sept 2014-Aug 2018 Ph.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., Science; B.S., Economics - Jilin University, China

Major: Computational Mathematics; Minor: Finance and Financial Management
Major GPA: 3.85 over 4.00; Overall GPA: 3.76 over 4.00
Performance Ranking: top 3 over 78
Outstanding Class(17 selected from 78, top 2 over 17)

Working Experience

Sept 2018-Present *Postdoctoral Fellow*
- Department of Mathematics, The University of Hong Kong, Hong Kong

Research Interests

- Quantitative Methods in Finance and Risk Management
- Stochastic Modeling and Optimal Portfolio Management
- Machine Learning and its Application in Finance and Actuarial Science
- Computational and Data-driven Innovation in Interdisciplinary Science

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.* Accepted for publication in Computational Economics, online available, 2018.
- 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, 2018.
- Dong-Mei Zhu, Jia-Wen Gu, **Feng-Hui Yu**, Tak-Kuen Siu and Wai-Ki Ching. *Optimal Pairs Trading with Dynamic Mean-variance.* Preprint, 2018.
- 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, 2018.
- **Feng-Hui Yu**, Wai-Ki Ching, Jia-Wen Gu and Tak-Kwong Wong. *Optimal Mean-Variance Pairs Trading Strategies.* In preparation, 2018.

Conference/Workshop/Research Experience

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 lecture**, 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
Sep-Nov 2016
Sep-Nov 2015 **Teaching Assistant**, Department of Mathematics,
- The University of Hong Kong, Hong Kong
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: dongmeizhu86@gmail.com

Prof. Guangyue HAN (address teaching)
Department of Mathematics,
The University of Hong Kong, Hong Kong.
Email: ghan@maths.hku.hk