Fenghui Yu

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The University of Hong Kong, Website http://fenghuiyu.github.io

Pokfulam Road, Hong Kong. Birth Date December 20, 1992

Working Experience

Sept 2018-Present Postdoctoral 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., 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)

Research Interests

- Applied Probability, Stochastic Modeling and Optimal Stochastic Control
- Quantitative Methods in Finance, Actuarial Sciences and Risk Management
- Applied Data Science, Machine Learning and its Application
- Computational and Data-driven Innovation in Interdisciplinary Science

Honors and Awards

Scientific Research Network (WOG) Grant - Research Foundation Flanders (FWO), Belgium
Conference Grant for Research Postgraduate Students
- The University of Hong Kong, Hong Kong
SIAM Student Travel Award - <i>SIAM, USA</i>
Doris Chen Postgraduate Travel Grant - The University of Hong Kong, Hong Kong
International Student Travel Award - PIMS, Canada
HKU Foundation Postgraduate Fellowship - The University of Hong Kong, Hong Kong
Postgraduate Scholarship - The University of Hong Kong, Hong Kong
First Rank Scholarship - Jilin University, China
Outstanding Undergraduate - Jilin University, China
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, available online, 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.
- Feng-Hui Yu, Wai-Ki Ching, Tak-Kuen Siu. *Multi-Period Optimal Mean-reverting Spread Trading Strategies with Hidden Markovian Regime Switching*. 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 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