Yanzhen Chen

Update: August 24, 2022

Contact imyanzhen@ust.hk Assistant Professor

Information Department of Information Systems, Business Statistics and Operations Management

HKUST, Hong Kong

EDUCATION Ph.D., Information Systems, The University of Texas at Austin June 2017

Advisor: Andrew B. Whinston

M.A., Finance, Guanghua School of Management

Peking University, China July 2012

Research Interests Topics: FinTech, Game Theory, Health Care Management, Statistical Learning, Causal

Inference

Methodologies: Structural Models, AI and Machine Learning, Statistical Learning,

Mobile-based Randomized Experiments, Applied Econometrics

Publication Journal Publications

> O.H.M Padilla, James Sharpnack, Yanzhen Chen, and Daniela Witten. "Adaptive Non-Parametric Regression With the K-NN Fused Lasso." Biometrika, Volume 107, Issue 2, June 2020, Pages 293-310.

> Yanzhen Chen, Huaxia Rui, Andrew Whinston. "Tweet To the Top? Social Media Personal Branding and Career Outcomes," MIS Quarterly, June 2021.

Sunil Mithas, Yanzhen Chen, Chewei Liu, Kunsoo Han. "Are Foreign and American Workers Complements or Substitutes? The Case of Information Technology Professionals," Accepted by MIS Quarterly.

Sunil Mithas, Yanzhen Chen, Yatang Lin, Alysson Oliveira. "On Causality and Plausibility of Treatment Effects in Operations Management Research," Accepted by **POM** (Production and Operations Management).

O.H.M Padilla, Wesley Tansey, and Yanzhen Chen. "Quantile regression with ReLU Networks: Estimators and minimax rates," Accepted by JMLR (Journal of Machine Learning Research).

WORKING PAPERS Yanzhen Chen, Huaxia Rui, Andrew Whinston. "Conversation Analytics: Can Machines Read between the Lines in Real-Time Strategic Conversations?," Ready to submit. Sijia Zhou, Yanzhen Chen, Xin Li (equally contributed). "Jump-start Mobile Health: The Impact of E-prescription on Mobile Health Consultation Demand,"* Ready to Submit

Work in Progress Yanzhen Chen, Yabin Yang, Yang Han. "Gender Preferences in Patient Choices: Evidence from a Large-scale Randomized Experiment," Experiments in progress.

INVITED TALKS

CONFERENCE AND Yanzhen Chen, Sunil Mithas. "Leveling Playing Field? Do Affirmative Actions Close the Gap in Wage," 2021 Workshop on Information Systems and Economics (WISE), Austin, Texas. December 2021

> Yanzhen Chen, Shu He, "A crypto ATM or a Criminal ATM: The impact of cryptocurrency ATM on local crime activities," 2021 Statistical Challenges in Electronic Commerce

Research (SCECR), Madrid & Segovia, Spain. June 2021

Yanzhen Chen, Yatang Lin, Arun Rai, "A Check on Gig Driver Background Checks: Make Sure or Detour," **NUS Dept of IS & Analytics Seminar**, April 2021

Yanzhen Chen, Xin Li, Sijia Zhou. "Jump-start Mobile Health: The Impact of E-prescription on Mobile Health Consultation Demand," 2019 Workshop on Information Technology and Systems (WITS), Munich, Germany. December 2019

Yanzhen Chen, Huaxia Rui, Andrew Whinston. "Between the Lines: Quantifying Firm' Fundamentals from Language,"* invited speaker for the Econ RAD seminar, Office of the Comptroller of the Currency, U.S. Department of Treasury, Washington, DC. November 2017.

Yanzhen Chen, O.H.M Padilla, Andrew Whinston. "Way to Better Healthcare: How Clinical Guidelines Guide Surgeons,"* 8th Conference on Health IT and Analytics (CHITA), Washington, DC. November 2017.

Yanzhen Chen, Huaxia Rui, Andrew Whinston. "Between the Lines: Quantifying Firm' Fundamentals from Language,"* Fintech: The Impact on Consumers, Banking, and Regulatory Policy, Federal Reserve Bank of Philadelphia. September 2017.

Yanzhen Chen, Huaxia Rui, Andrew Whinston. "Does Reputation Management on Social Media Boost Career? Evidence from the Market for Executives,"* 27th Workshop on Information Systems and Economics (WISE), Dublin, Ireland, December 2016.

INVITED INDUSTRYHKUST x HashKey Blockchain Business Model Challenge. "Scalability in Blockchain: Talks Challenges and Solutions." **Keynote Speaker**, Hong Kong, October 2021.

HKUST Center for Economic Policy, "Cryptocurrencies, Blockchains and the Digital Economy." **Panelist** with Anthony Lee Zhang, Ben El-Baz and Christine Parlour, Hong Kong, May 2022. Panel Speaker, "Fintech Innovations and Its Value to Business," 2018

Blockchain Open Technology Forum, Hsinchu, Taiwan. October 2018

Research Grants

Principal Investigator:

- Early Career Scheme (HK\$553,000), Speak without Speaking: Stock Prices and the FOMC Press Conferences, Hong Kong Research Grants Council, 2019
- IEMS Research Grants (HK\$168,000), Social Impacts of Sharing Economy, with Yatang Lin, HKUST Institute for Emerging Market Studies, 2018

Co-Investigator:

- Theme-based Research Scheme (HK\$20,659,000), Contributing to the Development of Hong Kong into a Global Fintech Hub, Hong Kong Research Grants Council 2019.
- HKUST & WeBank Joint Laboratory Project (HK\$750,360), Programmatic Advertising Retargeting and AI Customer Service, Webank, 2019

Media Coverage

Bloomberg Businessweek, "Branding Yourself on Twitter Works (It Did in 2012, Anyway)," 25-Feb-2021

South China Morning Post. "Online practices changing world of work," 6-Jun-2018 South China Morning Post"The Role of Internet in Labor Markets," 24-May-2019 Hong Kong Economic Journal Opinion, "The Value of AI in Financial Meetings," 24-Sep-2018

Hong Kong Economic Journal Opinion, "Innovation and limitations of AI applications," 19-Nov-2018

Teaching
INTERESTS

Data Mining and Artificial Intelligence in Finance, Algorithmic Trading, Blockchain and Their Business Applications, Advanced Analytics Programming, Causal Inference.

TEACHING EXPERIENCE

Course Developer and Instructor

Cryptocurrency, Blockchain, and Their Business Applications, HKUST (MBA level)
Co-teach with Allen Huang
Spring, Summer, Fall

Recognition of Excellent Teaching in 2020 and 2021

FinTech and Cryptoventures Spring

Recognition of Excellent Teaching in 2021

Course Instructor

Introduction to Information Systems, HKUST Fall
Introduction to Information Systems, University of Texas at Austin Fall 2015

Guest Instructor

IS Doctoral Seminar: Current Research in IS (Ph.D. level), HKUST 2019, 2021 FinTech Foundations and Overview, HKUST via Coursera Spring 2018 Decision Support Systems (MBA level), University of Texas at Austin Fall 2014

Ph.D. Qualification Exam Author

Ph.D. Qualification Exam Author for Quantitative Research in IS 2020, 2022 Ph.D. Qualification Exam Evaluator 2019, 2021

Faculty Advisor

Undergraduate Research Opportunities Program:

Supervised 13 Undergraduate Students on Algorithmic Trading Strategies 2019

Honors and Awards

ICIS 2016 Doctoral Consortium Fellow	December 2016
Best Paper Award, IROM Research Symposium, Austin, TX	February 2016
The University of Texas at Austin Graduate School Fellowship	Summer~2016
Graduate School Continuing Fellowship, UT Austin	2016 - 2017
Honorable Mention, Mathematical Contest in Modeling,	2012
The Mathematical Association of America	
First Prize, China Undergraduate Mathematical Contest in Modeling	2012
$(\mathrm{Top}\ 1.49\%)$	
Second Prize, Undergraduate Mathematical Contest in Modeling	2011
$(Top \ 6.43\%)$	

SKILLS

Programming skills:

• Python, Solidity, R, MATLAB, SAS, Julia, C++, NoSQL, SQL, Java, PHP, Shell Script, and LATEX

Application Programming Interfaces (API):

• Twitter, Facebook Graph, Google Maps, LinkedIn

Languages:

• English (fluent), Mandarin Chinese (native), Spanish (basic)

SERVICE AND ACTIVITIES

Executive Committee Member, HKUST Institute for Emerging Market Studies, 2018-2020

Course Developer for ISOM 3350 (Fintech and Cryptovetures) and Co-Developer for ACCT 5801 (Blockchain Technology)

ISOM Department Search and Appointments Committee, 2019-2021

ISOM Department Search Interviews, 2017- 2021

Mphil Advisor for Lucy Zhao

HKUST Mainland Undergraduate Admission Interview in Beijing, 2018, 2020

Sample Class Instructor for HKUST Business Summer Camp, 2018

Presented at BizInsight@HKUST, to MBA alumni and the industry, on how the development of the Internet and social media has affected the online labor market

Panel speaker, as a representative from HKUST, 2018 Blockchain Open Technology Forum, Hsinchu, Taiwan, 2018

Contributed to two issues of HKUST Business School Magazine Biz@HKUST

Associate Editor, International Conference on Information Systems (ICIS), Blockchain, DLT, and Fintech Track, 2020

Program Committee, Conference on Information Systems and Technology (CIST) 2017, 2019, 2020, 2022

Program Committee, Workshop on Information Technology and Systems (WITS) 2019 Session Chair, DSI 2016 Business Analytics: Information Analytics Session

Reviewer, Journal of Machine Learning Research JMLR , Annals of Statistics AOS , $\mathit{Biometrika}$

Reviewer, Management Science, MIS Quarterly, Information Systems Research

Reviewer, Production and Operations Management, POM

Associate editor, ICIS 2022, Blockchain, DLT and Fintech Track

Associate editor, PACIS 2023, Economics of IS Track

Discussant, WISE 2021