

Vincent Y. Zhuang, Ph.D.

Age breeds wisdom.

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CONTACT INFORMATION	School of Accounting & Finance, Faculty of Business The Hong Kong Polytechnic University, Hong Kong	+852 - 3400 3294 ✉ vincent.zhuang@polyu.edu.hk
ERDŐS NUMBER	My Erdős Number is 3 . (Vincent Y. Zhuang - Andrew B. Whinston - Daniel J. Kleitman/Bruce L. Rothschild - Paul Erdős)	
BACON NUMBER	My Bacon Number is ∞ . Hopefully a real number will be available in the near future.	
ERDŐS-BACON NUMBER	My Erdős-Bacon Number is ∞ . Hopefully a real number will be available in the near future.	
ACADEMIC GENEALOGY	My Academic Genealogy humbly goes back to Isaac Newton and beyond using data from the Mathematics Genealogy Project. A diagram of my Academic Genealogy is available on my personal website thanks to Joseph C. Bonneau, Ian A. Goldberg, and Gerhard P. Hancke.	
HIGHEST EDUCATION	Doctor of Philosophy, City University of Hong Kong, Kowloon Tong, Hong Kong Visiting Ph.D. Student, McCombs School of Business, The University of Texas at Austin, TX, USA	
RESEARCH INTERESTS	Topics: Managerial Financial Communication, Corporate Financial Reporting, Managerial Traits, Security Economics, CryptoEconomics, DeFi, Modern Cryptography, Information Security, Mobile Payment, Real Estate and PropertyTech, RFID and Smart Cards, Industrial IoT Methodologies: Financial Econometrics, Field Experiments, Applied Cryptography, Privacy Models, Machine Learning in Finance, Proximity Authentication Protocols	
HIGHLIGHTS	“Data! Data! Data! I can’t make bricks without clay.” The Adventures of Sherlock Holmes, by Sir Arthur Conan Doyle, 1892 To advance finance and accounting analytics with artificial intelligence thereby creating business value from unstructured big data .	
CURRENT POSITION	RAP School of Accounting & Finance, Faculty of Business, The Hong Kong Polytechnic University	
REFEREED JOURNAL PAPERS (BUSINESS ANALYTICS)	* UTD 24 = Top 24 Journals for UT Dallas Top 100 Business School Research Rankings; * FT 50 = Top 50 Journals used in Financial Times Research Ranking. ● Security Economics 1. “Understanding Security Vulnerability Awareness, Firm Incentives, and ICT Development in Pan-Asia,” with Y. Choi, S. He, A. Leung, G.M. Lee, and A.B. Whinston, <i>Journal of Management Information Systems (JMIS)</i> , Volume 37, Issue 3, Pages. 668-693, 2020. Impact Factor: 7.838, (FT 50) <ul style="list-style-type: none">● Funded by US National Science Foundation (NSF) and HK Public Policy Research Funding Scheme (PPR)● Best Research-In-Progress Runner-Up Award at WITS 2017● Presented in ISOOneWorld 2017, WITS 2017, WEIS 2018, BIGS 2018, CityU HK IS Workshop 2018, and HICSS 2020	

REFEREED
JOURNAL
PAPERS
(INFORMATION
SECURITY &
CRYPTOGRAPHY)

- **Cryptographic Protocols and Privacy Models**

3. “Energy-Efficient Distance-Bounding with Residual Charge Computation.” with A. Yang, G.P. Hancke, D.S. Wong, and G. Yang. *IEEE Transactions on Emerging Topics in Computing*. vol. 8, no. 2, pp. 365-376, October 2017. Impact Factor: 7.691
2. “Exploring Relationship between Indistinguishability-based and Unpredictability-Based RFID Privacy Models.” with A. Yang, G.P. Hancke, D.S. Wong, G. Yang, and J. Weng. *Future Generation Computer Systems*. Vol 82, pp. 315-326, May 2018. Impact Factor: 7.187
1. “A New Unpredictability-Based RFID Forward Privacy Model and a Provably Secure Construction.” with A. Yang, K. Liang, D.S. Wong, and X. Jia. *Security and Communication Networks*. Volume 8 Issue 16, Pages. 2836–2849, November 2015. Impact Factor: 1.791

REFEREED
CONFERENCE
PAPERS

- **Security Economics**

12. “Information Disclosure and Security Vulnerability Awareness: A Large-Scale Randomized Field Experiment Across the Trans-Pacific Region,” with Y. Choi, S. He, A. Leung, G.M. Lee, and A.B. Whinston, Accepted at *HICSS 2020 - 52nd The Hawaii International Conference on System Sciences. Hawaii, USA*
11. “Information Disclosure and Security Policy Design: A Large-Scale Randomized Experiment in Pan-Asia,” with Y. Choi, A. Leung, G.M. Lee, S. He, and A.B. Whinston. Accepted at *17th Annual Workshop on the Economics of Information Security (WEIS 2018)*, Innsbruck, Austria.
10. “A Pan-Asian Field Experiment of Organizational Awareness to Information Security and Preparedness Against Cybercrime,” with Y. Choi, A. Leung, G.M. Lee, S. He, and A.B. Whinston. Accepted at *27th Workshop on Information Technology & Systems 2017 (WITS 2017)*, Seoul, South Korea. **Best Research-In-Progress Runner-Up Award**
9. “On Decentralizing Clearing and Settlement Process for Prediction Markets and Automatic Order Book Matching: No Front-Running,” with A. Leung. Accepted at *The 16th Workshop on e-Business 2017 (WeB 2017)*, Seoul, South Korea.
8. “Towards A Better Measure of Cybersecurity Awareness: An Exploratory Study of Online Scams in Pan-Asia” with Y. Choi, A. Leung, G.M. Lee, S. He, and A.B. Whinston. Accepted at *ISOneWorld and Annual Security Conference 2017*, Las Vegas, NV, USA.

- **e-Learning**

7. “When Innovation Meets Evolution: An Extensive Study of Emerging e-Learning Technologies for Higher Education in Hong Kong.” with H. Ma, H. Xie, A. Leung, G.P. Hancke, and F. Wang. *1st Symposium on Emerging Technologies for Education (SETE 2016)*. Lecture Notes in Computer Science, vol 10108, pp 574-584. Springer. 2016
6. “On Security and Privacy of Quick Response System in Classroom Teaching.” with Y. Chen, H. Xie, and F. Wang. *1st Symposium on Emerging Technologies for Education (SETE 2016)*. Lecture Notes in Computer Science, vol 10108, pp 591-597. Springer. 2016

- **Cryptographic Protocols and Privacy Models**

5. “Matching in Proximity Authentication and Mobile Payment EcoSystem: What Are We Missing?” with A. Leung, and J. Hughes. *12th Workshop on RFID and IoT Security (RFIDSec 2016)*, Lecture Notes in Computer Science, vol 10155, pp 163-172. Springer, 2017

4. "How to Demonstrate Our Presence without Disclosing Identity? Evidence from a Grouping-Proof Protocol." with G.P. Hancke, and D.S. Wong. *The 16th International Workshop on Information Security Applications (WISA 2015)*, Lecture Notes in Computer Science 9503, pp. 1-13, Springer 2016
3. "A New Unpredictability-Based RFID Privacy Model." with A. Yang, D.S. Wong, and G. Yang. *The 7th International Conference on Network and System Security (NSS 2013)*, Lecture Notes in Computer Science 7873, pp. 479-492, Springer, 2013.
2. "A Highly Efficient RFID Distance Bounding Protocol Without Real-time PRF Evaluation." with A. Yang, D.S. Wong, G. Yang, and Q. Xie. *The 7th International Conference on Network and System Security (NSS 2013)*, Lecture Notes in Computer Science 7873, pp. 451-464, Springer, 2013.
1. "An Efficient Single-Slow-Phase Mutually Authenticated RFID Distance Bounding Protocol with Tag Privacy." with A. Yang, and D.S. Wong. *The 14th International Conference on Information and Communication Security (ICICS 2012)*, Lecture Notes in Computer Science 7618, pp. 285-292, Springer, 2012.

MEDIA
COVERAGE

Quantifying and publicizing a firm's security levels leads to reduced spam and may strengthen security over time

[Science Daily] [UBC Sauder] [Phys.org] [UConn Today] [EurekAlert!]

Rating Companies' Cybersecurity Preparedness May Lead To Stronger Sites

[Science Blog]

Spam Shaming to Improve Cybersecurity

[McCombs Medium] [Texas Enterprise]

PROFESSIONAL
SERVICES AND
ACTIVITIES

Inaugural Student Program Committee Member (Student PC or Shadow PC):

37th IEEE Symposium on Security and Privacy (IEEE S&P Oakland 2016) 2016

Program Co-Chair:

2nd International Workshop on User Modeling for Web-based Learning 2016

Local Organization Chair:

RFIDSec 2016: The 12th International Workshop on RFID and IoT Security 2016

Publicity Co-Chairs:

The 1st International Symposium on User Modeling and Language Learning 2017

The 4th International Workshop on Semantic Computing and Personalization 2017

The 22nd International Conference on Database Systems for Advanced Applications 2017

Program Committee Member (PC Member):

The Pacific Asia Conference on Information Systems (PACIS) 2020-2022

IEEE International Conference on Blockchain and Cryptocurrency (ICBC) 2019-2022

International Workshop on Advances in Artificial Intelligence for Blockchain (AICchain) 2020

IEEE International Conference on Blockchain (ICB) 2018-2022

International Conference on Web-based Learning (ICWL) 2017-2021

Global Chinese Conference on Computers in Education (GCCCE) 2017-2021

The 11th International Conference on Information Security Theory and Practice	2017
The 1st International Symposium on User Modeling and Language Learning	2017
The International Workshop on Affective and Sentimental Computing	2017
The 4th International Workshop on Semantic Computing and Personalization	2017
The 12th International Workshop RFID and IoT Security (RFIDSec)	2016
International Symposium on Emerging Technologies on Education (SETE)	2016-2018

Ad-hoc Journal Reviewer:

Journal of International Accounting Research (JIAR)	2021
Information Technology and Management (ITM)	2020-2021
Communications of the Association for Information Systems (CAIS)	2019
Journal of Universal Computer Science (JUICS)	2019
IEEE Transactions on Network and Service Management (TNSM)	2020-2021
IEEE Transactions on Industrial Informatics (TII)	2015-2021
IEEE Transactions on Computers (TC)	2017
International Journal of Machine Learning and Cybernetics (JMLC)	2017
Computer Networks	2015
Ad Hoc Networks	2015
International Journal of Distributed Sensor Networks (IJDSN)	2014

Conference Reviewer:

The Pacific Asia Conference on Information Systems (PACIS)	2020-2022
53rd Hawaii International Conference on System Sciences (HICSS)	2020-2021
International Conference on Information Systems (ICIS)	2018-2021
IEEE International Conference on Blockchain and Cryptocurrency (ICBC)	2019-2022
IEEE International Conference on Blockchain (ICB)	2018-2022
Global Chinese Conference on Computers in Education (GCCCE)	2017-2021
International Conference on Web-based Learning (ICWL)	2017-2021
The 11th International Conference on Information Security Theory and Practice	2017
The 1st International Symposium on User Modeling and Language Learning	2017
The International Workshop on Affective and Sentimental Computing	2017
The 4th International Workshop on Semantic Computing and Personalization	2017
The 12th International Workshop RFID and IoT Security (RFIDSec)	2016
IEEE Symposium on Security and Privacy (IEEE S&P)	2016
IEEE International Symposium on Industrial Electronics (IEEE ISIE)	2016
Conference on Information Systems and Technology (CIST)	2016
Workshop on Information Security and Privacy (WISP)	2016
ACM Symposium on Information, Computer and Communications Security (ASIACCS)	2013
International Conference on Network and System Security (NSS)	2013
International Conference on Information and Communications Security (ICICS)	2012

TEACHING
INTERESTS

Information Security, Applied Cryptography, Accounting and Finance Analytics, DeFi, DEconomy, CryptoEconomics, DLT and Cryptocurrency Technologies, Information Management, Business Analytics, Digital Economy, Financial Technology, Computer Networking and Programming