Yao Tung HUANG (Don HUANG)

Co-Founder & Chief Scientist, AQUMON • AI & Mathematical Modeling in Wealth Management

don.huang@magnumwm.com LinkedIn www.aqumon.com

Summary

Investment scientist and entrepreneur with 17+ years of experience spanning financial mathematics, stochastic control, and AI/model-driven wealth management. Co-founded AQUMON (2016) and led the build-out of core technical teams, architecture, product logic, and algorithm engines for institutional digital wealth management.

Research Interests

- Financial Mathematics
- Probability Theory
- Stochastic Control
- Portfolio Management and Optimization
- Machine Learning and AI for Asset/Wealth Management

Professional Experience

AQUMON

Co-Founder & Chief Scientist *Nov 2015 – Present*

Hong Kong and Singapore

- Co-founded AQUMON and led the end-to-end build of the core technical team, system architecture, product logic, and algorithm stack, establishing a top-tier wealth management investment algorithm engine in Asia.
- Drove vertical applications of mathematical models and AI in WealthTech, including portfolio optimization, portfolio analytics, risk modeling, and LLM-enabled wealth management workflows.
- Led the AQUMON team to develop AI-driven wealth management solutions for multiple financial institutions in Singapore, improving operational efficiency and investment outcomes with strong market feedback.
- Built and scaled institutional partnerships globally (60+ institutions), contributing to AQUMON's leading position in Asia's digital wealth management landscape.

DBS Bank

Quant & Structurer, Treasury and Markets *Aug 2008 – May 2010*

Hong Kong SAR and Singapore

- Worked with sales and trading to deliver hedging and investment solutions for corporate and retail clients via derivative products.

Academic Appointments

The Hong Kong University of Science and Technology (HKUST)

Lecturer and Visiting Scholar *Aug 2015 – Jan 2016*

- Research fields: Machine Learning, Financial Mathematics, Stochastic Control, Probability Theory.
- Teaching (Fall 2015): *MATH2511 Fundamentals of Actuarial Mathematics*, *MATH4999 Capstone Projects in Mathematics and Economics*.

City University of Hong Kong

Postdoctoral Fellow *Sep 2014 – Aug 2015*

- Worked with Prof. Qingshuo Song on research in machine learning, financial mathematics, stochastic control, and probability theory.

Imperial College London

Visiting Scholar *Nov 2014 – Dec 2014*

London, United Kingdom

- Collaborated with the Mathematics Department on stochastic control research.

Education

The Hong Kong University of Science and Technology *2011 – 2014*

Ph.D. in Mathematics (Machine Learning, Financial Mathematics, Stochastic Control, Portfolio Optimization)

The Hong Kong University of Science and Technology *2007 – 2008*

M.Sc. in Mathematics (Financial Mathematics and Statistics)

Huazhong University of Science and Technology *2000 – 2004*

B.Eng. in Computer Science and Information Systems

Selected Publications

1. **Yao Tung Huang**, Pingping Zeng, and Yue Kuen Kwok. *Optimal Initiation of Guaranteed Lifelong Withdrawal Benefit with Dynamic Withdrawals.* SIAM Journal on Financial Mathematics, 8(1), 804–840, 2017.
2. **Yao Tung Huang**, Qingshuo Song, and Harry Zheng. *Weak Convergence of Path-Dependent SDEs and Functionals in Pricing Basket CDS with Counterparty Risk and Contagion Risk.* SIAM Journal on Financial Mathematics, 8, 1–27, 2017.
3. **Yao Tung Huang** and Yue Kuen Kwok. *Regression-Based Monte Carlo Methods for Stochastic Control Models: Variable Annuities with Lifelong Guarantees.* Quantitative Finance, 16(6), 905–928, 2016.
4. **Yao Tung Huang** and Yue Kuen Kwok. *Analysis of Optimal Dynamic Withdrawal Policies in Withdrawal Guarantee Products.* Journal of Economic Dynamics and Control, 45, 19–43, 2014.

Invited Talks (Academic Conferences)

- **NUS–UTokyo Workshop**, Singapore, 26–27 September 2013.
- **8th World Congress of the Bachelier Finance Society**, Brussels, Belgium, 2–6 June 2014.
- **The 5th International Gerber–Shiu Workshop**, Hong Kong, 7–8 July 2014.
- **SIAM Conference on Financial Mathematics & Engineering**, Chicago, USA, 13–15 November 2014.

Honors and Awards

- HKUST Research Excellence Award
- The George K. Lee Foundation Scholarships
- Ph.D. Scholarship (2011–2014)

Military Service

- Served mandatory military service (2004–2006) under the **Army, Ministry of National Defense (MND), Taiwan**, as an **Anti-Armor Assault Team Member**, strengthening grit and resilience, teamwork, and a high standard of discipline.

Additional Information

- Location: Hong Kong SAR and Singapore
- Web: AQUMON • LinkedIn: Profile

Last updated: Jan 2026