

HIEU TRONG NGUYEN

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Birthday: 3rd April 1990

I am a meticulous and quick-learning researcher with training in mathematics and experience in machine learning. I am eager for a challenging role in which I can grow and improve my data science and computational modelling skills.



EDUCATION

- **Master Degree in Quantitative & Computational Finance**, John von Neumann Institute, Vietnam (2015-expected 2018)
 - Thesis: application of Random Matrix Theory in analyzing structure of a stock market and in cleaning a correlation matrix for optimization purposes.
- **Master & Bachelor (combined) Degree in Mathematics, University of Bath, United Kingdom** (2012 - 2015)
 - Graduated with First Class Honors (GPA = 4.0 rounded to US-equivalent)
- **Undergraduate courses, University of Cambridge, United Kingdom** (2010-2012)
 - Started the undergraduate program in Mathematics (GPA = 3.7 US-equivalent)
- **International Baccalaureate**, Rossall School, United Kingdom (2007-2010)
 - Results: English 7/7, Maths 7/7, including a 4000-word research essay investigating the Fibonacci sequence.
- **High School**, Vietnam National University at Hanoi - High School for Gifted Students (2005-2007)
 - Specialized in Physics

AWARDS

- First Class Honours, University of Bath, United Kingdom (2015)
- Top 15 of the *British Mathematics Olympiad* (2009)
- Second Place in the *National "Mathematics and Youth" Magazine Competition* (2004)

EXPERIENCE

- **Research Team Member**, John von Neumann Institute, Vietnam (2016, 2017)
 - Logistic Optimization (for VinGroup) Sep 2016 – Dec 2016
 - Fraud Detection in Vietnamese Stock Market (for Hanoi Stock Exchange) Oct 2017 - present: develop machine learning-based models to detect anomalies and/or collusive activities.
- **Teaching Assistant to graduate courses**, John von Neumann Institute, Vietnam (2016, 2017)
 - Stochastic Calculus
 - Derivatives Pricing in Finance (with Python)
- **Intern, Research Assistant**, Hanoi Stock Exchange, Vietnam (2013, 2015)
 - Participated in building *Yield Curve for the Government Bond Market*

PUBLICATIONS

- Hieu T. Nguyen, Phuong N.U. Tran, Quang Nguyen, “*An Analysis Of Eigenvectors Of A Stock Market Cross-Correlation Matrix*”, accepted for presentation at the International Econometric Conference of Vietnam ECONVN'2018, Ho Chi Minh City, January 15--16, 2018, and published in its proceeding by Springer.

SKILLS

- Competent in R, Python. Decent in Latex and Excel. Adequate in Matlab.
- Analytical, observant.
- Eager to learn and acquire new knowledge and skills.
- Strong aptitude to adapt to various cultures.
- Proficient in English (GRE: Verbal 158, Quant 167, Writing 4.0)

OTHER ACTIVITIES

- Played Badminton Team 2 of University of Cambridge and University of Bath, United Kingdom.
- Participated in the 200-mile charity walk at University of Cambridge, among other charity running events.
- Casual footballer
- Avid podcast listener

REFERENCES

- Dr. Quang Nguyen, Head of Quantitative & Computational Finance Department.
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