

Hang Lou

Curriculum Vitae

PERSONAL DETAILS

Birthday 09/03/1995
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Website <https://hanglou.github.io/>

EDUCATION

PhD. Mathematics

Sep 2019-
2023

University College London

- **Research interests:** Rough Paths theory, Deep learning, Geometric Deep learning, Stochastic analysis, Time series modelling, Machine learning
- **PhD. Projects:**
 - Path development network with finite-dimensional Lie group
 - Synthetic time series generation with expected Path development
 - Spatial learning for structure-based drug design
 - Explainable machine learning on financial time series
 - Early detection of Sepsis and Covid-19
- **Invited talks:**
 - The Banff International Research Station: New interfaces of Stochastic Analysis and Rough Paths workshop
 - Datasig: Rough Paths interest group
- **Scholarships:** Chinese Scholarship Council Award and Faculty's Dean's Prize

MSc. Statistics

Oct 2017-
Sep 2018

Imperial College London

- **Qualification:** Distinction
- **Courses:** Machine Learning, Big Data, Applied Statistics, Computational Statistics, Probability Theory, Statistical Inference, Pricing and Hedging, Financial Econometrics, Computational Stochastic Process
- **Master Thesis:** Hedging and Pricing by Deep Learning

BSc. Mathematics

Oct 2014-
June 2017

Imperial College London

- **Qualification:** First Class Honours
- **Courses :** Time Series, Scientific Computing, High Performance Computing, General Relativity, Mathematical Analysis, Calculus, Games Risk and Decision, Computational PDEs, Linear Algebra

WORK EXPERIENCE

Arabesque AI

April 2021-
Oct 2021

London, AI research intern

- Time series feature engineering and market clustering.
- AI engine training and evaluation.

Zeus Capital

Aug 2016-
Sep 2016

London, Summer Intern

- Presented bottomed up research about ten stocks to senior management.
- Implemented Modern Portfolio Theory and build up an Efficient Frontier for stocks in Excel.
- Regularly Attended client-facing meetings.

Stanhope Capital

July 2016-
Aug 2016

London, Summer Intern

- Research and presented China's 2016 credit bubble.
- Research and presented Turkish coup and its further impact on global economy.
- Regularly attended portfolio meetings and client-facing meetings.

SKILLS

Languages Mandarin (Native)
 English (Business Fluent)

Software PYTHON, GITHUB, PYTORCH, MATLAB, TENSORFLOW, KERAS,
 L^AT_EX, R, SCALA, SPARK, POWERPOINT

INTERESTS

Badminton Mixed team captain of Imperial College Badminton