George Lai Gie Ho

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Education

The Cooper Union, New York, NY.
Bachelor of Science in Engineering, Interdisciplinary Engineering. Projected May 2019.
G.P.A.: 4.0/4.0
Relevant Coursework: Machine Learning, Artificial Intelligence, Data Structures and Algorithms, Probability, Mathematical Statistics, Linear Algebra

Experience

Quantitative Research and Investments Intern Summer 2017
Quantopian Inc., Boston

- Operationalized and validated an in-house statistical risk model for US equities
- Developed open-source and in-house Python libraries for portfolio risk analysis and performance attribution
- Maintained, developed and managed 3 open-source Python libraries: collaborated with worldwide team to coordinate significant feature additions
- Operationalized risk analysis and performance attribution of institutional fund portfolio, leading to significant restructuring of fund-level portfolio

Undergraduate Research Fellow Summer-Fall 2017
Complex Fluid Physics and Engineering (CoFPhE) Laboratory

- Performing direct numerical simulation of complex ABC fluid flow to determine roles of density, Stokes number and Coriolis forces on inertial transport
- Results will be presented at 2017 annual meeting of the American Physical Society Division of Fluid Dynamics at Denver, Colorado

Projects

Independent Projects in Algorithmic Trading Fall 2016
Quantopian, Cornell University

- Analyzed minutely market pricing data using machine learning algorithms to research and develop a pairs-trading strategy in Python
- Won 3rd place in Cornell University's Sparkstone Algorithmic Trading Challenge (out of hundreds of competitors) using a momentum long-short strategy

Molecular Modeling of Ammonium Halide Nanoparticles Spring 2016
The Cooper Union

- Wrote MATLAB scripts and performed quantum calculations to develop a molecular model for ammonium fluoride nanoclusters
- Presented findings at the 2016 Meeting of the American Chemical Society

Skills

- *Programming Languages:* Fluent in Python, C++ and MATLAB. Functional in Haskell and Fortran.
- *Software Packages and Libraries:* NumPy, pandas, matplotlib, scikit-learn.
- *Languages:* Functional in Mandarin, Cantonese and French

Awards

- Cooper Union Half-Tuition Scholarship 2015 - 2019
- Cooper Union Innovator Merit Scholarship 2015 - 2019
- Dean's List (School Honors) All semesters

References

Available upon request.