

George Ho

<https://eigenfoo.xyz>
gh@eigenfoo.xyz

EDUCATION

THE COOPER UNION

BSE IN GENERAL ENGINEERING

Expected May 2019 | New York, NY

GPA: 4.0

CHINESE INT'L SCHOOL

IB DIPLOMA

Grad. May 2015 | Hong Kong

COURSEWORK

GRADUATE

Financial Signal Processing

Convex Optimization

Computational Graphs for Deep Learning

Data Science Projects for Social Good

Bayesian Machine Learning

Artificial Intelligence

UNDERGRADUATE

Data Structures and Algorithms

Mathematical Statistics

Probability Models and Stochastic

Processes

Linear Algebra

SKILLS

PROGRAMMING

Fluent:

Python • PyData ecosystem (e.g. sklearn,

PyMC3, Tensorflow) • Git

Functional:

Bash • SQL • C++ • MATLAB

LINKS

Github:// [eigenfoo](#)

Twitter:// [@_eigenfoo](#)

LinkedIn:// [eigenfoo](#)

REFERENCES

Available upon request.

WORK EXPERIENCE

QUANTOPIAN | QUANTITATIVE RESEARCH AND INVESTMENTS INTERN

Summer 2017, 2018 | Boston, MA

- Researched and developed proprietary Bayesian hierarchical model and other machine learning models for statistical algorithm selection.
- 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.

THE COOPER UNION | UNDERGRADUATE RESEARCH FELLOW

2017-2018 | New York, NY

- Performed direct numerical simulation of complex ABC fluid flow in Python and Fortran to determine roles of density, Stokes number and Coriolis forces on inertial fluid transport.
- Investigated machine learning using privileged information: implemented simple and efficient algorithms for applications in pre-term birth diagnosis.

PROJECTS

PYMC3 | OPEN-SOURCE PROBABILISTIC PROGRAMMING

Aug 2018 – Present | PyMC Development Team

- PyMC3 is a popular Python framework for Bayesian modeling and probabilistic machine learning.
- Joined the core development team upon several months of sustained contribution to the backends and samplers.

HATE SPEECH ON REDDIT | NATURAL LANGUAGE PROCESSING

Jan 2018 – June 2018 | The Cooper Union, NY

- Identified most hateful subreddits using a hate speech classifier, and modelled posts and comments using text clustering techniques.
- Collaborated with an interdisciplinary team of artists and architects to visualize text clusters and user data. Work put up for exhibition at Cooper Union's 2018 End of Year Show.

ALGORITHMIC TRADING | TIME SERIES ANALYSIS

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.

AWARDS

2015-2019 Cooper Union Half-Tuition Scholarship

2015-2019 Cooper Union Innovator Merit Scholarship

All Semesters Dean's List (School Honors)