

https://eigenfoo.xyz hello@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

#### LINKS

Github://eigenfoo LinkedIn://george-ho-915080126

#### COURSEWORK

#### **GRADUATE**

Data Science Projects for Social Good Machine Learning and Art Bayesian Machine Learning Artificial Intelligence

#### UNDERGRADUATE

Data Structures and Algorithms Mathematical Statistics Probability Models and Stochastic Processes Linear Algebra

### SKILLS

#### **PROGRAMMING**

Fluent:

Python (and PyData ecosystem: NumPy, pandas, scikit-learn, etc.)
Functional:

C++ • MATLAB • Shell

#### **WORK EXPERIENCE**

## **QUANTOPIAN** | QUANTITATIVE RESEARCH AND INVESTMENTS INTERN Summer 2017, 2018 | Boston, MA

- 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.
- Contributed to crowd-sourced algorithm selection process using machine learning techniques.

## 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**

# HATE SPEECH ON REDDIT | NATURAL LANGUAGE PROCESSING Jan 2014 - Present | Ithaca, NY

- 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.

#### **ALGORITHMIC TRADING** | Time Series Analysis

Fall 2016 | Quantopian; Cornell University

- Identified most hateful subreddits using a hate speech classifier, and modelled posts and comments using text clustering techniques.
- Worked 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.

### AWARDS

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

## REFERENCES

Available upon request.