(609) 608-0336 Phone: Email: zhm@princeton.edu Website: hervature.com

Skills

Programming:

C++, Python, Ruby, MATLAB

Web Development: HTML5, CSS3, JavaScript, SQL

Web Frameworks:

Django, Ruby on Rails, Bootstrap

Software:

Git, Perforce, Puppet, LaTeX

Languages:

English, French

Awards

- The Gordon B. and Nancy R. Stewart, Jr. Fellowship
- Dean's Scholar x 4
- Nellie & Ralph Jeffery Award in Mathematics x 2
- Edith Whyte Prize in Macroeconomics Theory
- The Annie Bentley Lillie Prize in Calculus
- Queen's Principal's Scholarship
- Governor General's Award

Extracurriculars

- Teach math to inmates through the Prison Teaching Initiative
- Manager at the

Proficient in many areas of advanced mathematics and electrical engineering such as signal processing, control theory, and statistical modeling. Keen interest in computer science and constantly keeping my skills at the bleeding edge. Whether it is a new web framework or a new efficient algorithm, I stay on top of the field. Continuously looking to apply my knowledge to the fields of economics and finance. Current focus of research is optimization theory and its intersection with computer science.

Education

Princeton University, Princeton, NJ

-PhD Candidate in Operations Research and

- Linear & Nonlinear Optimization
- Statistical Theory and Methods
- Probability Theory
- Advanced Algorithm Design

Financial Engineering

- Computational Finance in C++
- Convex & Conic Optimization
- Statistical Learning & Nonparametric Estimation
- Stochastic Calculus

Queen's University, Kingston, ON

2011-2016

2016-present

- -Bachelor of Science Engineering, Mathematics and Engineering, Systems and Robotics Option
- -Bachelor of Arts, Economics

Experience

Siemens Healthineers, Princeton, NJ **Business Program Intern**

Summer 2017

- -Responsible for the formulation and development of the underlying algorithm used in a scheduling application.
- -Programmed in Python using Pandas manipulate the data and CPLEX to model and solve the optimization problem.
- -Researched deep learning and reinforcement learning to create a novel scheduling algorithm.

2014-2015 Altera Corp. (now Intel PSG), San Jose, CA Software/Hardware Engineer Intern

- -Maintained and improved internal test infrastructure.
- -Regularly coded Perl firmware and Django web applications. Automated the deployment of infractructure using Punnet