

Roger Zhang

rogerz888@gmail.com | (585) 465-4803 | <https://www.seas.upenn.edu/~rogerz>

Education

UNIVERSITY OF PENNSYLVANIA – GPA 3.92

- Bachelor of Science in Engineering (B.S.E.) in Computer Science Aug 2015 – May 2019
- Master of Science in Engineering (M.S.E.) in Computer Science Aug 2015 – May 2019
- Dean's List 2016, 2017, 2018

SKILLS

Experience with: Java, JavaScript, C, q/kdb+, C++, Python, Haskell, SQL, HTML, CSS, OCaml

Graduate coursework: Algorithms, Machine Learning, Database Systems, Networked Systems, Haskell

Experience

MORGAN STANLEY – Technology Summer Analyst

June 2018 – Present

- Working in the foreign exchange trading systems team on utilities that aid in tracing FX orders through various exchanges, using q/kdb+ to retrieve data
- Processing and analyzing large kdb+ databases of FX order history to improve strategies for placing orders on exchanges

BENTLEY SYSTEMS – Software Development Intern

May 2017 – Aug 2017

- Developed web applications and tools to simulate driving through 3D reality models of cities and roadways, with support for real-time location updates
- My team's project was the only intern project featured at a company-wide conference

UNIVERSITY OF PENNSYLVANIA

Teaching Assistant

Sept 2016 – May 2018

- CIS 160: Mathematical Foundations of Computer Science
- Topics: graph theory, set theory, probability, proofs, combinatorics, etc.
- Led a class section, created problem sets and solutions, graded homework and exams

Private Tutor

Mar 2016 – Dec 2016

- Courses: organic chemistry, multivariable calculus

UNIVERSITY OF ROCHESTER (Laboratory for Laser Energetics) – Research Assistant

Jul 2014 – May 2015

- Used hydrodynamics code to optimize laser beam configurations for the National Ignition Facility
- Received National Nuclear Security Administration Defense Programs Award of Excellence (2016)
- Co-author of an article published Cambridge University Press Journal of Plasma Physics

Projects/Activities

Citadel/Correlation One Data Open Summer 2018 Invitational – 1st Place Team (\$20,000 prize)

- (Team of 4) Worked with large datasets to write a report that analyzes the relationships between large events in cities and airline traffic and prices

Transient Detection (Python)

- Applications of various machine learning techniques to classify images of deep space objects (transients) for use in a research group in Penn Physics and Astronomy

Friends Network (Java)

- A program that retrieves information about your facebook friends graph, and contains implementations of various functions and algorithms to analyze the graph

Regular Expressions and Automata Library (Haskell)

- A library of data structures and algorithms related to DFAs, NFAs, and Regex's, implemented in Haskell

Tech it Out Philly Mentor

- Mentor for a program that introduces local high school students to technology, e.g. by building HTML/CSS websites