Rick Huang

rickh@mit.edu | rickhuang.me | 925.922.2983

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Candidate for B.S. in Computer Science and Mathematics

Expected Jun 2019 | Cambridge, MA | Cumulative GPA: 4.8

Relevant Coursework: 6.867 Machine Learning • 6.828 Operating Systems Engineering • 6.005 Software Construction
6.004 Computation Structures • 6.046 Design and Analysis of Algorithms • 14.12 Economic Applications of Game Theory
18.100 Real Analysis • 18.701 Abstract Algebra • 18.600 Probability and Random Variables • 18.200 Discrete Mathematics

EXPERIENCE

TWO SIGMA INVESTMENTS | Software Engineer Intern

Expected Jun 2017 | New York, NY

- Expected to start as a software engineer intern for ten weeks beginning in June 2017

FIVE RINGS CAPITAL | Trader Intern

Expected Jan 2017 | New York, NY

- Expected to start as a trader intern as part of the MIT Externship Program for four weeks starting early January

BLOOMBERG L.P. | Software Engineering Intern

May 2016 – Aug 2016 | New York, NY

- Designed a C++ system with custom graph data structures to match and track historical buy and sell trades
- Built C++ backend calculation system for evaluating custom profit and loss formulas given prematched trades
- Constructed web user interface for custom profit and loss formula input for consumption by backend system

CORTINA ACCESS | Software Engineering Intern

Jan 2016 | Mountain View, CA

- Tested open source improvements to deep packet inspection and machine learning protocols for packet identification
- Performed statistical analysis to identify feasible solutions for improving peer-to-peer packet routing

PROJECTS

PROBABILISTIC IMAGE SUPER-RESOLUTION

Dec 2016 | Massachusetts Institute of Technology

- Built a probabilistic model to perform image super-resolution for 6.867 based on approach by Tipping and Bishop
- Used Bayesian posterior modeling of Gaussian processes on multiple low-resolution patches of pixels for extrapolation
- Trained model in Python with Stan, a language performing Bayesian inference with Markov chain Monte Carlo sampling

POT-LIMIT OMAHA HOLD'EM POKERBOT

Jan 2016 | Massachusetts Institute of Technology

- Produced an automated Pot-Limit Omaha poker bot in Python for 6.176, the 2016 MIT Pokerbots tournament
- Used Monte Carlo simulations for equity calculation and regression models for training actions based opponent behavior
- Received first place in daily casino tournament, seventh place overall, and most creative strategy award from KCG Holdings

AUTOMATED DRUG AND ADVERSE EVENT PREDICTOR

Aug 2014 | Stanford School of Medicine

- Designed a predictor using support vector machines in R to match drugs and potential adverse events from clinical notes
- Navigated MySQL clinical notes database to generate statistical relationships between diabetes and atherosclerosis

MISCELLANEOUS

MIT CSAIL | 6.046 Grader

Sept 2016 - Dec 2016 | Cambridge, MA

- Responsible for grading weekly problem sets for the second algorithms course, involving topics such as complexity theory

ZETA BETA TAU | Executive Committee

Aug 2016 - | Brookline, MA

- Responsible for managing activities, general community relationships, and organizational logistics for the brotherhood

AWARDS

2016 4th Place, MIT Fall Series of Poker Main Event
2016 1st Place, MIT Pokerbots Casino Tournament
2014 USA Math Olympiad Qualifier
2014 USA Physics Olympiad Semifinalist
2012 USA Computing Olympiad, Gold Division

SKILLS

Proficient

Python • C++ • Java • Javascript • HTML • CSS • LaTeX • Git

Basic

Linux • C • NumPY • SciPy • Networking • TCP/IP • Stan
Bash • R • Matlab • MySQL • Adobe Photoshop