Rosie Zou





Education

University of Waterloo

Joint Honours Degree B.CS + B.Math in Stats Graduation: April 2019

Skills

Programming Languages

Python, Java, C, C++, R, Stata, SQL, VBScript

Libraries & Frameworks

WEKA, scikit-learn, pandas, numpy, scipy, flask

Foreign Languages

Fluent Mandarin Advanced French Intermediate Japanese Beginner Spanish

Communication

Business writing Public speaking Investor relations Digital marketing

Relevant Courses

Object-Oriented Programming Mathematical Statistics Simulation of Complex Systems Logic and Computation Introduction to Combinatorics Algorithms and Data Structure

Experience

Research Assistant, University of Waterloo May - Aug 2017

- Supervised by Prof. Matthias Schonlau, School of Actuarial Science
- Wrote a Stata plugin that implements all functions from the Random Forest class in the WEKA library, as a part of a 5-year NLP research project
- Plugin scheduled to release to all Stata users in late August
- Source code available upon request at https://git.uwaterloo.ca/schonlau/randomforest

Equity Trading Intern, TD Securities

Apr - Dec 2016

Improved growth strategies and business development

- Analyzed and visualized TD historic trades and order routing trends
- Researched various financial databases to compile market reports
- Regularly conducted research and data analysis used for marketing
- Re-worked latency calculation script used for performance analysis Optimized daily operational efficiency
- Automated and enhanced numerous daily reports and trade records
- Allocated over thirty institutional clients' high-volume daily trades
- Communicated regularly with clients to ensure timely trade clearing
- Coordinated with various teams to resolve trading technical issues

Associate Business Analyst, Scotiabank

Sep - Dec 2015

Assisted PM in compliance software migration project

- Performed daily QA and updated JIRA issue log for the team
- Tracked and examined project costs for resource misallocations
- Updated heat maps and configured access rights during UAT phase

Projects

Waterloop

May 2017 - present

- University of Waterloo's competitive Hyperloop team
- Software systems developer, telemetry lead
- Designed and created mathematical models for navigation system using IMU, optical, and photoelectric distance sensors
- Designed and implemented raw data noise reduction methods using support vector regression with radial basis function kernel
- Code available at github.com/teamwaterloop/sensors

Hackathon Projects

Sep 2015 - Oct 2016

- 7 hackathons where I designed and implemented ML algorithms
- Details at devpost.com/rosiezou and my personal site