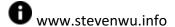
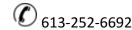
Steven Wu





Education

MSc Statistics:

Under supervision of Graduate Chair Dr. Tim Swartz (Co-op Option)

Sept 2015 – TBD

Simon Fraser University, Burnaby BC

• 4.07/4.33 (Letter Grade: A): NSERC CGS-M, Special Entrance Scholarship, Graduate Fellowship

Bachelor of Mathematics Honours:

Computational and Applied Mathematics and Statistics (Co-op Option)

Sept 2010 - May 2015

Carleton University, Ottawa ON

• 10.7/12.0 (Letter Grade: A-): Dean's List 2010-2015

Relevant Coursework: Machine Learning, Data Mining, Artificial Intelligence, Spatial Statistics, Time Series Analysis, Statistical Computing, Software Engineering, Web Development

Technologies and Skills

- Proficient: Python, Java (Spring, Hibernate, Maven), R, Git/SVN, MongoDB, LaTeX
- Intermediate: PostgreSQL, Flask, HTML, CSS, UNIX, Amazon Web Services (AWS), D3.js, jQuery
- Familiar: MATLAB, JavaScript, C, C++, SAS, MINITAB

Tech Work Experience

Research & Development Intern	MDA Ltd.	Summer 2016 – Fall 2016
Technical Services Developer	360pi	Summer 2015
Writer (Data Science)	Carleton CQADS	Winter 2015
QA Automation	360pi	Summer 2013 – Summer 2014
QA Analyst	360pi	Summer 2012

Highlights of Work Experience

- Designed and implemented (1) REST API wrappers that expose R&D algorithms and (2) an Analytics web service that connects the wrappers to an existing web app, for clients of MDA who regularly use Canada's RADARSAT-2 data
- Worked on infrastructure & web crawlers to parse product information on retailer websites
- Experienced a Kanban system that required problem solving and multi-tasking, implementing software solutions to customer specific requests or bugs of varying priorities independently
- Implemented on-demand job creation for internal QA Tool; designed new schema, proper handling of new type of jobs, created new UIs, and updated the reports display

Relevant Projects

Full Stack Programming Projects

SeeCIS (seecis.com) (Python, MongoDB, Flask, D3)

Sept 2013 - Now

- SeeCIS is a web app targeted for CIS basketball coaches that I made from scratch
- Scrapes play-by-play, box scores, and player information for any available CIS season
- Cleans the play-by-play using AI algorithms that considers contextual information

- Produces new metrics using the play-by-play such as +/-, % of contributions when scoring margin is within x, % of contributions in the 4th quarter, to name a few
- Implemented system for matching misspelled names across seasons to allow career analysis

Forum Scraper for Sentiment Analysis (Python, MongoDB, Flask)

Feb 2015

- Demo link available: stevenwu.pythonanywhere.com
- Prototype of my NSERC thesis which can crawl RealGM's NBA Draft board
- Representations of posts, threads, and users for each post in each topic stored in a database
- Displays various summarizing data using text analytics with a web interface

Programming Projects for Paying Clients

NHL Trades and Trust Research (R, Python, Pandas, Networkx, LaTeX)

Oct 2015

- Wrote software (data manipulation, variable creation, model building using log-linear models, handling overdispersion) to implement proof of concept requested by client
- Given a tight deadline of less than 10 days, delivered a written and oral presentation with strong positive feedback and a follow-up request for more work
- Negotiated my own rate and hours, working independently to complete the task

CFL Data (Python, MongoDB)

Feb 2015 - Mar 2015

- Created system in Python to scrape a given season of CFL play-by-play game data, store in a database, and collect all 3rd down plays that did not end in a punt for later analysis
- Sold articles that use the codebase as a reference for tutorials on data analysis for Carleton's Centre of Quantitative Analysis and Decision Support

Hackathon Programming Projects

Receiver Entropy Visualizer (R, Shiny) for MIT Sloan Conference 2016

 Created a Shiny app in R that analyzed video data from a football game to produce (1) heatmaps of movement for offensive receivers and (2) an entropy score to reflect unpredictability, given 6 hours to work individually

@astro_tweet_bot - twitter.com/astro_tweet_bot (Python, Flask) for NASA Hackathon 2014

- Twitter bot that reads tweets from sky-gazing enthusiasts and responds with observable sky phenomena, built and deployed live for 2014 NASA Hackathon in two days with two others
- Identified sources of useful information, tonightssky.com and spaceweather.com/flybys, developed scrapers that take the website's information depending on the user's request

Communication Experience

Teaching Assistant (15 courses) Event Coordinator, TSSU Rep Organizer	Carleton, SFU OTTanalytics CUMC 2014	Fall 2012 – present Fall 2015 – present January 2015
Head of Logistics & Volunteers Co-op Peer Helper	Carleton University Carleton University	Summer 2013 – Summer 2014 Fall 2012 – Winter 2013
Campus Tour Guide Speaker (Blackjack, SportVU) Tutor	Carleton University CUMC 2012, 2013 Self-Employed	Fall 2012 – Fall 2013 Summer 2012, Summer 2013 Summer 2008 - present