Jonathan Wen

Contact

jonathanwen95@gmail.com
(416) – 712 – 8801
ca.linkedin.com/in/jstarw
github.com/jstarw
jstarw.github.io

Skills

Languages: Scala, Python, C++, JavaScript, PHP, MySQL, MATLAB

Libraries: Spark, Angular, D3.js, jQuery, Node.JS

Academic Interests:
- Software Engineering
- Machine Learning
- Data Science

Education

University of Waterloo
Systems Design Engineering, Class of 2019

Achievements
Cumulative GPA of 3.7
President's Scholarship, 2013

Interests

Photography, Guitar, Toronto Raptors, Traveling (not in basketball)

Experience

DataESP: Data Scientist – Waterloo, ON — May 2016

- Developed Association Rules algorithm in Spark to analyze market trends
- Wrote scripts to improve cluster performance, **effecting 4x increase in speed**
- Built backend architecture which handles millions of records, using Pandas
- Normalized data with statistical methods to extend algorithm functionality
- Created Angular/D3 frontend interface to upload datasets and display visually

Indochino: Full Stack Engineer - Vancouver, BC — Sep 2015

- Optimized website performance by reducing Memcached calls and using SQL Views, decreasing page load time by **upwards of 300%**
- Implemented highly performant data access tools using PHP and MySQL following MVC architecture and Object-Oriented design
- Worked on interface to update customer measurements, **saving $1000s/store**

Klick Health: Front End Developer – Toronto, ON — Jan 2015

- Developed various features for company intranet, including quick search
- Created dynamic kiosk page in React for conference with 11,000 attendees

Research

University of Waterloo: Research Assistant — Jan 2016

- Used Radon barcodes and cross validation to predict breast cancer tumours from ultrasound images, under the guidance of Professor Hamid Tizhoosh
- Generated contours for ground truth images and ingested into segmentation algorithm, used to predict region of tumour for any image

Projects

InstaTabV2 – Python, Scikit-Learn

- Currently building photo recommendation model using Flickr API
- Using k-means algorithm and neural networks to predict user's preference

Handwriting Recognition – MATLAB

- Recognized MNIST handwritten numbers using neural networks and multi-class classification, achieved an accuracy of over 96%

CITYouth Twilio – Node, MongoDB, Twilio

- Application which enables attendees to text questions and receive answers
- Used by large conferences and events, tested during a live conference

CensorMe – Node, jQuery

- Blocks web pages based on content using natural language processing