

GARY SHEN

garyshen.me

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Skills

Languages: Java, C#, C++, SQL, JavaScript, HTML/CSS, Ruby/Rails, R, Assembly, VHDL

Technologies/Concepts: Android, Node.JS, React.JS, Redux, Meteor, MongoDB, Shiny, REST, Ajax, Supervised Machine Learning

Education

Ivey Business School - HBA Candidate

- 2017-2019 (Expected)

Western University - BESC (Computer Engineering) Candidate

- 2015-2017
- 94% Average, 3.9/4.0 GPA
- Dean's Honor Roll 2016, 2017

Publications

A novel WiFi-based indoor localization system - IEEE CSCWD 2017

- Shen, G., Yin, X., Wang, X., Shen, C.
- Finalist for Best Student Paper Award

Mitigating sensor differences for phone-based human activity recognition - IEEE SMC 2016

- Yin, X., Shen, G., Wang, X., Shen, W.

Awards

Ivey Alumni Association Toronto Chapter HBA Scholarship (\$24,000) - 2017

NSERC Undergraduate Student Research Award (\$6,000) - 2016

National President's Scholarship (\$50,000) - 2015

Activities and Interests

Western Founders' Network VP Education - 2016-Present

Algo Trading Club Platform Developer - 2016-2017

Thames Valley Science/Engineering Fair Sponsorship Head - 2015-Present

Interests: Hockey, Golf, Ping Pong, Pro Sports Analytics, Board Games

Experience

Magnet Forensics - Software Developer Co-op

May 2017-Aug 2017

- Full-stack development for a metric tracking and visualization dashboard; changes resulted in a more streamlined internal development workflow and were used across all development teams
- Added new multithreading and previewing functionalities for the product licensing tool, reducing wait times in the license renewal process from 90 minutes to less than 15 minutes
- *Technologies used: React/Redux, MySQL, C#, Python, REST*

Cambridge Brain Sciences - Student Developer

Jan 2017-Apr 2017

- Recognized a need to make cognitive tests used in academic neurological research more modern and provided a scalable solution by porting puzzles from flash player to a full web stack; weekly uses of the cognitive tests increased from 1,000 to 3,000
- Established a comprehensive strategy for validating that new and old versions behaved identically, considering automated test coverage and behaviour testing to allow over 100,000 data entries and baseline standards to remain relevant
- *Technologies used: Ruby on Rails, React/Redux, MySQL*

Western University - Undergraduate Researcher

Nov 2015-Aug 2016

- Developed an indoor locationing technique based on a WiFi signal strength propagation based model; resulting system was 6 times more time-efficient than existing methods
- Prototyped an activity recognition app, applying machine learning methods (SVM classifiers) to improve recall from 76% to 92% and precision from 84% to 88%
- *Technologies used: Android, Java, REST, Weka, MATLAB*

Projects

IOU 2017

- A web application for bill splitting and person to person payments
- *Technologies used: Meteor, MongoDB, Paypal API*

NHL Prediction Model 2016-2017

- A machine learning model for predicting player stats and NHL results
- *Technologies used: R*

Group Tools Chatbot 2017

- A Facebook messenger chatbot adding functionalities to group chats
- *Technologies used: NodeJS, Messenger Platform API*

BikeSafe for V2V 2016

- A smartwatch app detecting cyclists' hand signals
- *Technologies used: Android, Java, Python, REST, Pebble API*

Machine Learning Based Bed Monitoring System 2015

- A system for monitoring bed-related scenarios and sleep patterns
- *Technologies used: Java, Zigbee, Weka*