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
- 2017-2020 (Expected)

Western University - BESc Candidate
- 2015-2020 (Expected)
- 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.

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

Top First Year Design Project - 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 a web application that is used by over 50% of employees
- Added new multithreading and previewing functionalities for the product licensing tool, improving the speed of the license renewal and removal process by over 25%
- **Technologies used: React.JS/Redux, MySQL, C#, Python, Batch, REST**

Cambridge Brain Sciences - Student Developer .... **Jan 2017-Apr 2017**
- Modernized cognitive testing suite by porting puzzles from flash player to HTML/JS, leading to the launch of a new website that almost doubled the website visits
- Constructed mathematical model for standardizing scores from new versions to be compatible with prior data, allowing over 100,000 data entries to remain relevant
- **Technologies used: Ruby on Rails, SQL**

Western University - Undergraduate Researcher .. **Nov 2015-Aug 2016**
- Prototyped an innovative indoor locationing technique based on a self-developed WiFi signal strength propagation based model; resulting system was 6 times more time-efficient than current standard
- Applied machine learning methods to a human activity recognition app to improve recall from 76% to 92% and precision from 84% to 88%
- **Technologies used: Android, Java, REST, Weka, MATLAB**

Projects

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

NHL Prediction Model — **2017**
- A machine learning model for predicting player stats and NHL results
- **Technologies used: R**

Group Tools Chatbot — **2017**
- A Facebook messenger chatbot adding several features to group chats (gold star tracker, randomizer, and reaction picture sender)
- **Technologies used: NodeJS, Messenger Platform API**

BikeSafe for V2V — **2016**
- A smartwatch app detecting cyclists' hand signals for the purpose of future vehicle to vehicle communication protocols
- **Technologies used: Android, Java, Python, REST, Pebble API**

Smart Bed Monitoring System — **2015**
- A machine learning based system for detecting bed-related scenarios and monitoring sleep patterns
- **Technologies used: Java, Zigbee, Weka**