GARY SHEN

garyshen.me

linkedin.com/in/gshen7 // github.com/gshen7 // gshen7@uwo.ca // 226-700-3927

Skills

Languages

Proficient:
- Java
- C#
- C++
- Javascript
- HTML/CSS

Familiar:
- Ruby/Rails
- SQL
- R
- MATLAB
- Assembly
- VHDL

Technologies/Concepts

Proficient:
- Android
- Ajax
- React/Redux
- REST

Familiar:
- MVC Architecture
- Supervised Machine Learning
- Weka Machine Learning Tool
- Shiny
- Zigbee

Education

Ivey Business School - HBA Candidate
- 2017-2020 (Expected)

Western University - BESc Candidate
- 2015-2020 (Expected)
- 94% Average
- Dean's Honour Roll 2016, 2017

Publications

A Novel Wifi-Based Indoor Localization System - IEEE CSCWD 2017
- Shen, G., Yin, X., Wang, X. and Shen, C.

Mitigating Sensor Differences for Phone-Based Human Activity Recognition - IEEE SMC 2016
- Yin, X., Shen, G., Wang, X. and 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

Team Canada International Science and Engineering Fair Top 30 - 2015

Canada Wide Science Fair Bronze Excellence Awards and Resource Challenge Award - 2011-2015

Experience

Magnet Forensics - Software Developer Co-op ..... **May 2017-Aug 2017**
- Created new dashboard page for monitoring regression of certain job metrics over builds of product.
- Added new view to dashboard providing product owners/dev managers with a quick summary of the health history of certain artifacts
- Added new previewing feature to licensing tool, improving efficiency of license renewal process by 15%
- Implemented custom artifact to help forensic investigators retrieve data stored by the Waze Android app
- Fixed various bugs in several products
- **Technologies used: React/Redux, SQL, C#, Python, Various APIs**

Cambridge Brain Sciences - Student Developer ..... **Jan 2017-Apr 2017**
- Ported cognitive web puzzles from flash player to HTML5 and JS
- Created model for standardizing scores from new versions to prior data
- Created test suite enabling automation of unit tests
- **Technologies used: Ruby on Rails, SQL**

Western University - Student Researcher ..... **Nov 2015-Aug 2016**
- Designed and prototyped new indoor locationing technique based on a self-designed signal strength propagation based model, with a theoretical pre-deployment efficiency gain of over 6 times compared to current standard for indoor locationing
- Applied machine learning methods on human activity recognition app to improve detection accuracy from 76% to 92%
- **Technologies used: Android, Java, REST, Weka, MATLAB**

Additional Projects

NHL Prediction Model **In Progress**
- Created a model using the perceptron machine learning algorithm for predicting results of NHL games and the season as a whole
- Produced a single comparable metric for evaluating all aspects of a player's contributions towards wins
- Correlated various advanced stats to fantasy hockey points
- **Technologies used: R**

BikeSafe for V2V **2016**
- Designed and implemented a system to better integrate cyclists in vehicle to vehicle communication protocols for future autonomous car systems
- Used a machine learning approach to calibrate the recognition of arm signals and make appropriate decisions for surrounding vehicles
- **Technologies used: Android, Java, Python, REST, Pebble API**

Smart Bed Monitoring System **2015**
- Applied machine learning tools to implement and train a model based on supervised force sensor data to detect bed-related scenarios and monitor sleep patterns and health
- **Technologies used: Java, Zigbee, Weka (Machine Learning Tool)**

Activities

Western Founders' Network VP Education	2016-Present
Algorithm Trading Club Platform Developer	2016-Present
TVSEF Sponsorship Committee Head and Judge	2015-Present