

# Sean Stappas

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## EDUCATION

### Bachelor of Engineering (Honours Electrical, Minor Software Engineering)

Sept. 2014 – May 2018

McGill University, Montreal, QC

- GPA: 4.0
- Dean's Honour List

## AWARDS & SCHOLARSHIPS

Beverly and Arthur Mendel Family Scholarships	2016	J. B. Woodyatt Prize	2015
NSERC Experience Award	2016	John Howard Ambrose Scholarship	2015
Mary Gilsig Scholarship in Engineering	2015, 2016	J. W. McConnell Scholarship	2014

## TECHNICAL SKILLS

**Languages:** Java, Python, PHP, C, Objective-C, Arduino, VHDL, SQL, MIPS Assembly

**IDEs and Editors:** Eclipse, Android Studio, IntelliJ IDEA, Visual Studio, Xcode, Sublime Text, vi, Arduino, IDLE

**Version Control:** Git, Mercurial

**Databases:** MySQL, Firebase (NoSQL), MS SQL Server, MS Access

**Operating Systems:** Windows XP/7/10, OS X, Ubuntu, CentOS

## WORK EXPERIENCE

### Digital Health Software Developer Intern (Cloud Team)

May 2016 – Aug. 2016

Tactio Health Group, Montreal, QC

- Created a **PHP** testing framework covering **60 %** of the back-end API, leading to increased bug detection
- Developed a **PHP** fake data generator with daily updating by using Cron jobs and a producer-consumer queue in **MySQL**, allowing for more realistic simulation of patients with various medical conditions
- Introduced silent background notifications on iOS with **Objective-C** to enable a more responsive user experience
- Improved notifications on Android by discarding old GCM tokens and by checking the HTTP response upon receiving a notification

### Java Developer

May 2015 – Aug. 2015

JNPSOft, Montreal, QC

- Made importing of car parts data from Excel to a SQL database **300 times** faster by implementing a bulk import in **Java**
- Improved the GUI of the company's main program, PartCat, by implementing the MVP architectural pattern
- Carried out rigorous unit and integration tests using the TestNG **Java** framework
- Produced custom-sorted PDF catalogs for major clients (Walmart, AutoPart, Shell, etc.) using **Java**

## PROJECTS

### McGill Robotics Team Member (Drone Electrical Division)

Sept. 2015 – Present

McGill University, Montreal, QC

- Created two-player *Connect-Four* game using **Arduino**, 70 LEDs, shift registers and a RedBoard microcontroller
- Planned the selection of parts for a UAV designed to compete in the AUVSI SUAS competition in 2017

### Project Manager, Java Developer (ECSE 211 Competition)

Jan. 2015 – Apr. 2015

McGill University, Montreal, QC

Design of an autonomous robot with ultrasonic and light sensors capable of navigating a map and launching balls at targets

- Organized scheduled milestones, tasks and resources for the team using a GANTT chart and Google Drive
- Implemented obstacle avoidance, moving-average, and differential filtering algorithms in **Java**
- Designed an accurate ping pong launcher with self-reloading capabilities using LEGO blocks and NXT motors