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, Objective-C, Arduino, VHDL, SQL, C, MIPS Assembly
IDEs and Editors: Eclipse, Android 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