Zeyad Saleh

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zeyadhazemsaleh@gmail.com | (514)585-6769 | Canadian Citizen

EDUCATION

MCGILL UNIVERSITY
BEng in Computer Engineering, Biomedical engineering minor
Expected Dec 2017 | Montreal, QC
Cum. GPA: 3.6/4
Golden Key International Honor Society

LINKS

Github:// **zeyadhazem**
LinkedIn:// **zeyadsaleh**
YouTube:// **zeyadhazemsaleh**
Twitter:// **@zeyadhazem**

COURSEWORK

UNDERGRADUATE
OS + practicum
AI + practicum
Digital System Design + practicum
Computer Architecture + practicum
Embedded Systems + practicum
Telecoms & Networking + practicum
Database Systems + practicum
Microprocessor Systems + practicum

SKILLS

PROGRAMMING
Over 5000 lines:
JavaScript • Java • C/C++
Over 1000 lines:
HTML • CSS • Swift • Python • MySQL
• VHDL • labView
Familiar:
Shell • Assembly

SPOKEN LANGUAGES
Arabic • English • French • Spanish

TOOLS
Wireshark • JIRA issue tracker • ROS • Xcode • LogicWorks • Adobe After Effects • Adobe Photoshop • Adobe Premiere

EXPERIENCE

DDMAL LAB | Undergraduate Research Assistant
May 2017 – Current | McGill University, Montreal, QC
Building **an open source layering plugin, Pixel.js** on top of **Diva.js** using **JavaScript ES6** to provide the ground truth data for OCR. Implemented the following features:
- **Tools:** brush, eraser (with size control), rectangle and grab.
- **Layers:** creation, destruction, renaming, colour and opacity control.
- **Exporting:** as CSV, colours PNG or image data PNG, export progress animation.
- **Others:** undo/redo actions, performance optimization, reproducing JS internal drawing functions to get all pixels spanned by shapes and paths.

Implemented all features in 2 months with no prior knowledge in web development.

CAE | Avionics Systems Intern
May 2016 – Sep 2016 | Montreal, QC
Integrated Garmin Load Updates and OEM packages on two Embraer Phenom aircrafts' virtual simulators **in C++**. Worked in a fast paced **Agile Scrum** environment.

HIGH PERFORMANCE COMPUTING LAB | Researcher
Jul 2015 – Sept 2015 | GWU, Ashburn, VA
Ported and optimized parallel benchmarks from **C and openMP** to **Chapel**. Analyzed the time performance of the programs on the lab's supercomputers.

SHARED REALITY LAB | Undergraduate Researcher
May 2014 – Aug 2014 | McGill Universty, Montreal, QC
Created a **Java** program that connects 2 rooms auditorily with a simple **GUI** allowing each user to control the quality of information to convey to the other end.

PROJECTS

SONO | Design Project
Sept 2016 – Present | Montreal, QC
An **iOS app** that uses **machine learning** to classify emotions through physiological signals, while transforming these signals into **biomusic** in real time.

DRIVE SAFE 🏆 | WearHacks
Oct 2015 | Montreal, QC
An award winning **Android app** that uses the **Muse headband** and **pebble watch** to analyze the brain activity of truck drivers and alert them in times of sleepiness.

MARS ROVER 🏆 | McGill Robotics
Sept 2014 - Dec 2015 | Montreal, QC
Implemented the **RS485 communications protocol in C** governing communication over the different subsystems of the rover. Used **ROS** and **Python** for arm control.

MOONWALKER | Project Manager
Feb 2015 - Apr 2015 | Montreal, QC
An **autonomous robot** with **Java** and **Lego Mindstorms**. Implemented the algorithms for the light sensor localization and odometry. Created and updated a Gantt Chart.

AWARDS

2015	top 10 hacks	Wearhacks, Drive Safe Application
2015	Best App of Analytics	Wearhacks, Drive Safe Application
2015	4th/25	Microsoft Coding Competition, McGill University
2014	3rd/40	European Rover Challenge (McGill Robotics)