

MATTHEW ROMLEWSKI

mechatronics engineering student

Contact

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🔗 www.github.com/mattromlewski

Skills

Tools

🔧 - Solidworks, Fusion 360
✍️ - AutoCAD, GD&T
⚙️ - Arduino, Lego NXT
📱 - AWS Lambda, Alexa Skills Kit
🤖 - Android Studio
📊 - Tableau, MS Access, DynamoDB
📦 - Git

Development

C++, VBA,
Java, Python, HTML5,
Javascript (Core & Node),
SQL, L^AT_EX

Education

University of Waterloo

*Candidate for B. A. Sc.,
Mechatronics Engineering*

2016 - Present

Co-op evaluation: Outstanding
Data Structures and Algorithms
Engineering Graphics and Design
Circuits

Achievements

2016 Schulich Leader Nominee
2016 Diocese of Hamilton Award
2014 OECTA Award

Interests

- ▶ Athletics - Football & Ultimate
- ▶ Hackathon culture - attended 5
- ▶ 3D printing
- ▶ Mobile & wearable technology
- ▶ Woodcraft & wood burning art

Experience

Database Development Intern

Independant Electricity System Operator (IESO)

Mississauga, Ontario

January - April 2017

- ▶ Programmed new functionalities into three **Access** databases
- ▶ Solved database issues on a regular basis with **VBA** and **SQL**
- ▶ Reduced corporate risk in a Tableau-transition initiative; accelerated by 90%
- ▶ Designated a Tableau subject matter expert after only a few weeks
- ▶ Designed sophisticated queries and UIs in Tableau

IT Assistant

Halton Catholic District Schoolboard- IT Division

Burlington, Ontario

July 2015

- ▶ Created a web-based application form for the school board using **HTML**
- ▶ Collaborated effectively with a teammate to set up three computer labs
- ▶ Troubleshooted hardware and repaired nine computers in one week

Projects

ShelfMate

devpost.com/software/shelfmate

Mechatronics 100 Final Project

December 2016

- ▶ Performed a full **engineering design process** to build a shelf-sorting **robot**
- ▶ Programmed precise movement with three degrees-of-freedom in **C**
- ▶ Created a **data structure** to model a physical shelf with coordinates
- ▶ Practised project management, technical report writing and presentations
- ▶ Worked hands-on with machine shop equipment and building materials
- ▶ Prototyped custom brackets in SolidWorks and fabricated using a **3D printer**

EasyAlexa3D

github.com/mattromlewski/EasyAlexa3D

Personal IoT Project

April 2017

- ▶ Created a voice-interactive front end for **3D printers** using **Amazon Alexa**
- ▶ Programmed a response algorithm in Node.js which called to a database
- ▶ Quickly learned and implemented Amazon Web Services, noSQL and APIs

Autonomous Maze Robot

May 2016

- ▶ Implemented infrared signal processing to avoid walls
- ▶ Assembled chassis and wired sensor array
- ▶ Coded navigation algorithm in Arduino to compare distances and drive

UnitedShare 🏆

devpost.com/software/unitedshare

SpartaHack @ MSU

February 2017

- ▶ Designed and built an **Android app** to raise awareness for the homeless
- ▶ Learned and utilized the Ratchet framework for Javascript and PhoneGap
- ▶ Awarded **Best hack** for social good
- ▶ Worked effectively with three teammates in 36 hours
- ▶ Delivered a clear and concise pitch during demonstrations