

# M. Subhan Altaf

2B Mechatronics Engineering | University of Waterloo

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## SKILLS

### Languages

Python  
C/C++  
JavaScript, Node  
SQL  
Java, Android  
Bash, Shell

### Web Technologies

Flask, Express  
Cloud Foundry  
Azure, GCP  
HTTP, Web Socket  
OAuth2

### Tools, OS

Git, Vim  
MATLAB  
Linux, Windows

### Databases

SAP HANA  
SQL Server

## ACTIVITIES

Motolab Student  
Design Team

UW Alternative Fuels  
Design Team

Student Council

Engineering Society  
Mentorship Director

Fruit Designing

## COURSES

Algorithms and Data  
Structures

Real-Time Systems

Microprocessors and  
Digital Logic

In-Memory Data  
Management

## EXPERIENCE

### ● **SAP** | Product Management

May '18 - Aug '18

Python, NodeJS, SQL, SAP HANA, XSA, ArcGIS, OAuth

Link: [Blogs](#), [CodeTalks](#)

- Initiated knowledge launch for python development in microservices architecture
- Developed demo web applications, wrote blogs covering data querying, voice commands, security, and geospatial analysis and visualization
- Met with customers to educate and gain feedback for future recommendations
- Tested NodeJS and DB development courses for Global TechEd Conference

### ● **Linamar** | Software Development

Sep '17 - Dec '17

Python, SQL, SolidWorks, VBA, AutoHotKey

- Re-invented product documentation writing process, increasing efficiency by 50% through automation scripts and enhanced search capabilities
- Designed data model to store CAD information for auto-updating documents
- Compiled tool library, analyzed images using pHash and Bing API

### ● **General Motors** | Innovation Development

Jan '17 - Apr '17

Arduino, Android, Bluetooth, Proto.io, SketchUp, Adobe AE

- Used lean principles to drive 3 early-stage development projects — prototyped, tested, iterated designs to ensure product plan meets market needs
- Facilitated 4 design thinking workshops, interviewed customers, and led ideation sessions to devise customer-centric solutions
- Developed VR, infotainment software, BT-interfacing hardware prototypes

## PROJECTS

### ● **IoT Medical Assistant** | 3rd Place, McGill Hacks '18

► [View Project](#)

C, NodeJS, Particle Electron, Web Sockets

- Device (for elderly) to detect fall and connect user to immediate medical care
- Set up data collection and sharing from accelerometer to web through sockets

### ● **AnxietyBot** | Best Use of Encryption, HackNY '18

► [View Project](#)

Python, AWS Lambda, RSA, IBM Tone Analysis API

- Alexa skill to help users in anxiety attacks by holding conversations
- Managed HTTP calls, processed input with NLP, researched RSA encryption

### ● **Others:** [Blok.It](#), [IoT Bicycle Helmet](#), [Coin Cashier](#), [Scheduler App](#), [Dentist POS](#)

## LEADERSHIP

### ● **uWaterloo Residence** | Engineering Peer Leader

Sep '17 - Dec '17

- Mentored 15 students through intense co-op job search process
- Held 1-1 counselling, helped students with professional development, networking