Talha Khalil

(587) 968-4372 | tkhalil0703@gmail.com | github.com/talhakhalil0703

EDUCATION

University of Calgary
Bachelor of Science in Electrical Engineering
Minor in Computer Engineering
GPA: 3.81/4.0
2017-22 (with Internship)

SKILLS

Programming Languages
C++, C, Python, MATLAB, Java, SQL, MIPS and Blackfin Assembly

Certifications
Machine Learning

Other
3D Printing, Git, Agile Development, SCRUM, Linux, Mac, and Windows

LEADERSHIP EXPERIENCE

Digitronics | University Club
Sept. 2019 - Apr. 2020
• Mentored members and taught them how to work with hardware (Arduino) and code in C
• Executive in charge of communication, organizing club events and debugging and developing projects

Project 90 | University Club
Sept. 2017 - Sept. 2019
• Team lead in charge of 15 other students, building plastic recycling machines
• Designed and built a plastic compressor machine and did the electrical wiring for 3 other machines

AWARDS

Biomedical Engineering Research Grant

Dean's List 2017-20

Jason Lang 2017-20

Alexander Rutherford Scholarship

First Year Scholar

EXPERIENCE

Learning Assistant | University of Calgary
Jan. 2020 - Aug. 2020 | Calgary
• Tutored first year and second year engineering students with course work

Undergraduate Researcher | Hotchkiss Brain Institute
May 2020 - Aug. 2020 | Calgary
• Developed a tool in Python and MATLAB that reduced data extraction from taking 2 weeks to 2 hours
• Developed a program in Python which significantly increased the efficiency of paper use (37 to 2 pages)
• Pending paper on Parkinson's disease deep brain stimulation targeting

PROJECTS

Course Registration System | Java and SQL
Software
• Developed a server-client application, with a login and registration system
• Designed and created an application which was used to register students into classes

Arduino - Android Mesh Network | C++
Embedded Systems Project
• Designed and created a device which used LoRa, Arduino and Bluetooth to send messages
• Aided in the design of an accompanying android application

Audio Clock | C
Embedded Systems Project
• Designed and created an audible clock for visually impaired individuals
• Programmed the clock software in C for PIC microcontroller
• Designed the speaker and analog filter for the clock and 3D printed the casing

Remote Controlled Car | C
Embedded Systems Project
• Created a remote-controlled car for the Arduino microcontroller in C

MATLAB Data Select | Python and MATLAB
Software
• Developed a tool which selects through MATLAB data figures quickly through a GUI interface using Pythons