Talha Khalil

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Education

University of Calgary **2017-22(with Internship)**

Bachelor of Science in Electrical Engineering | Minor in Computer Engineering | Internship Program

GPA: 3.81/4.0

Relevant Skills

Certifications Machine Learning

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

Software Quartus Prime & Modelsim (FPGA design), CrossCore Embedded (Eclipse), 3D Printing, Git

Project Management Skills Agile Project Development, SCRUM

Operating Systems Linux, Mac, and Windows

Work Experience

Learning Assistant for the University of Calgary **Jan – Aug. 2020**

- Tutored first year and second year engineering students with course work

Brain Signals Software (Academic) Researcher **May – Aug. 2019**

- Developed a tool in Python and MATLAB that reduced data extraction from taking 2 weeks to 2 hours
- Pending paper on Parkinson's disease deep brain stimulation targeting
- Developed a program in Python which significantly increased the efficiency of paper use (37 to 2 pages)

Projects

https://github.com/talhakhalil0703

Course Registration System - in Java and SQL

- 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 (Embedded Systems Project) - in C++

- 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 (Embedded Systems Project) - in C

- 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 (Embedded Systems Project) - in C

- Created a remote-controlled car for the Arduino microcontroller in C

MATLAB Data Select - in Python

- Developed a tool which selects through MATLAB data figures quickly through a GUI interface using Python

Leadership Experience

Digitronics (University Engineering Club) **Sept. 2019 – April 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 Engineering 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 **May 2019 – Aug. 2019**

Dean's List of Distinguished Students **Fall 2017 - Winter 2020**

Alexander Rutherford Scholarship **Fall 2017 - Winter 2018**