# HAKEEM SADIQ

## Computer Engineer

📞 519-981-0851  
🔗 hakeemsadiq.com  
@ Hakeem.o.sadiq@gmail.com  
📍 London, Ontario

## SUMMARY

I'm a Computer Engineer completing a degree in medical physics, with experience in both hardware and software projects.

## PROJECTS

### Development of the Double Frequency (19F/1H) Coil for a Clinical PET/MRI Scanner

📍 Lawson Health Research Institute
- Designed and constructed High-pass Birdcage Radio-frequency (RF) coil to function at 19F frequency (115Mhz)
- Designed an RF shield to change the resonance frequency of the coil to 122MHz

### Arithmetic Logic Unit
- 18 Operation ALU using the Basys3 FPGA (Verilog)
- Operations include arithmetic, bitwise logic, and register control

### Fan Controller
- Arduino controller (C++)
- Receives input speed, 0-5 from keyboard, adjust fan based on input, and outputs fan speed setting (LOW, MEDIUM, or HIGH) to an LCD

### Ideal Heroes - Gamified Learning Mobile App
- Application for teaching youth with intellectual disabilities interpersonal and intrapersonal skills (Android studio, Firebase)
- App included authentication, personalization, and mini-activities

### Brain-Computer Interface Experiment
- Worked with a team of 2 Engineering Students
- Created Shepard-Metzler mental rotation task simulation (Java)
- Captured brain signals using 64 Channel EEG (Biosemi systems)
- Processed and analyzed signals (MATLAB)

## EXTRACURRICULARS

### Head Coach
**WesternU Women's Football Team**
📅 08/2021 - 06/2022
- Plan, schedule, and run all practices, meetings, and team events
- Coached team to an 18-0 record in the OWIFA league, winning all 3 tournaments participated in as a first year head coach
- 16-1 record winning 4 out of 5 tournaments including 2 provincial championships and placing top 5 in the nation in 2022

## EDUCATION

### B.E.Sc Computer Engineering
**University of Western Ontario**
📅 09/2016 - 05/2020

### B.Sc (Spec) Medical Physics (Year 4)
**University of Western Ontario**
📅 09/2020 - Ongoing

## SKILLS

### Programming Languages and Technologies

VHDL  Verilog  C++  C  C#
microC  Java  JavaScript
Assembly/Machine  nodeJS
Python  SQL  Android Studio
Flutter  MATLAB  HTML5
Firebase

### CAD/Design Tools

Xilinx  Quartus  Cadence
Eagle  MicroCap

### Technical Skills

Computer Architecture

Object-Oriented Programming

Embedded systems

Network Architecture

Socket programming