

# Shahreen Qazi

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Portfolio Website: <https://sherriqazi101.github.io/sherri-website/>

Bear, DE

Phone Number: 302-359-2848

## EDUCATION

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### Cornell University

Bachelor of Science in Electrical & Computer Engineering and Computer Science

**GPA:** 3.422

- **Courses:** Object Oriented Programming, Digital Logic & Computer Organization

## EXPERIENCE

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### Engineering World Health Project Team (EWH)

Oct 2021-Present

#### *Electrical Subteam Member*

- Breadboarded N20 motors and linear actuators to create mobility in a hobbyist prosthetic hand in collaboration with Alt Bionics - medical device company - in order to make prosthetics affordable
- Programmed & prototyped in C++ a pulse oximeter using an arduino for a project in collaboration with the United Nations Population Fund (UNFPA) to help combat maternal mortality in the Ivory Coast.
- Prototyped a grip sensor using arduino & coding in C++ to calculate the force on the grip sensor to determine the time interval and duration of contractions of pregnant women for the UNFPA project
- Participated in workshops that involve using breadboarding with Raspberry Pi/Arduino, using soldering techniques, and designing PCBs

### Teaching Assistant (Department of Electrical/Computer Engineering)

Jan 2023-May 2023

- Teaching assistant for ECE 1210: Computing Technology Inside Your Smartphone: teaching topics consisting of: Digital logic, Computer organization, Instruction sets, Application Software, and Advanced performance techniques
- Challenge and engage students in office hours, assist students during class with any questions they have on material, and grade exams

### CardioVigi (Start-Up)

Summer 2022

#### *Product Design/Engineering Intern*

- Designed circuit portions which involved bluetooth modules, light sensors, and LEDs to relay information between the CardioVigi device that detects biomarkers of heart disease/attack and the user/smartphone
- Prototyped and created UI/UX interface in Figma for CardioVigi's device app to increase readability, ease of navigation, and organization of information collected from the device.

## PROJECTS

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#### *Personal Projects*

- Portfolio Website: Using HTML and CSS, I made a website describing me and the projects I've done and made it interactive using mouse hovering images that display text (Code in Github Repository)
- Arduino PCB: Created PCB of an Arduino using Autodesk Eagle by first assembling the schematic and then making the board outline by placing the components on the board. Optimized the PCB to be as small as possible and to have a ground layer using vias to make the wires more organized.

#### *Academic Projects*

- Microprocessor: Constructed a single-cycle processor using verilog HDL in Quartus, specifically coded modules and made test files for the Arithmetic Logic Unit, the Register File, Decoder, PC, and CPU

## SKILLS

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- Software: Python, Java/Javascript, C++/C, HTML, CSS, Eclipse's IDE, Git
- Hardware: Verilog on FPGA board, Eagle/PCB design, Breadboarding in Arduino/Raspberry Pi, Soldering
- Other: Microsoft Office Suite