‍‍Archit Bhatia

540 Caracole Way, Ottawa, Ontario K4A0W3  | (613) 804-7527 | architbhatia14@gmail.com | LinkedIn: Archit Bhatia | GitHub: architbhatia14

Profile:

Fourth year Computer Systems Engineer looking for a job in computer engineer. Basic knowledge working in embedded systems with FPGA while implementing them with hardware. Worked with SQL database while sending and receiving UDP files. Designed basic APP using Android Studio to communicate with a server RPi. Analyzed large sets of data to filter and display the data visually. Coded mathematical algorithms using C to efficiently reconstruct signals while implementing them on an FPGA.

Education:

**Computer System Engineering**

**Carleton University| Ottawa, ON**

**Expected Graduation April 2021**

****Computer Skills:****

**Operating System: Windows variants, Linux, IOS, Android mobile platforms**

**Languages: C, Java, Python, MATLAB, HTML**

**Programs Used: Verilog, Power BI, Android Studio, Git Hub/GitBash, NetBeans, Python,**

**Eclipse, Junit Testing**

**Design software: Creo, Photoshop, Illustrator, Microsoft**

Applied Projects:

**Research and Development**

**Compressive Sensing (4th Year project)**

**Carleton University, Ottawa ON**

* Researched algorithms used for reconstructing signals given off a heartbeat sensor
* Worked with a team to combine our research and proposed solution into reports
* Applied skills in C to code algorithms required based on purposed solution
* Implemented algorithms used for compressive sensing onto an FPGA board while connected to a heartbeat sensor
* Obtained relevant values from the sensor to recompose a sparse signal for the reconstruction of the signal
* Used command line to navigate through the project on GitHub repository and run the code for testing

**Simulation design and development**

**Elevator Subsystem (3rd Year project)**

**Carleton University, Ottawa ON**

* Developed a simulation for an elevator subsystem in Eclipses using Java.
* Used UML diagrams to create the basic classes for the subsystem and have them connecting.
* Used Server and Client systems to send messages between the subsystems.
* Implemented state machines to determine when an elevator has arrived at the location then send this information to the scheduler subsystem (main subsystem).
* Sent UDP packets to allow the use of multiple elevator systems to maximize the efficiency of the system.

**App design and Implementations**

**Smart Shelf (3rd Year Project)**

**Carleton University, Ottawa ON**

* Created a software plan and design of UML diagrams
* Designed basic GUI for the user to access shelf information
* Sent the user input as packets to SQL database
* Create code to test the basic functionality of the shelf
* Work with Python in Android Studio to code GUI
* Manage deadlines and met product requirements
* Debug communication errors between App and server RPi

**Website Design and Development (HTML)**

**Individual Project**

* Learned basic HTML to develop a personal profile webpage.
* Added imaging while displaying the basic functions of HTML.
* Applied text editing such as header colour, shaping, re-sizing, etc.
* Created customized hover functions for every individual tab as the user wishes to click on the specific subsections.
* Debugged errors involving overlays of images and texts.

Work Experience:

**Supervisor/Customer Service (Part-time)** October 2015 – Present

**Real Canadian Superstore**

* Train and supervise new employees, opened/closed cash register on daily basis, completed all necessary paperwork at night for closing.
* Handle problems other employees and customers encounter
* Complete returns and exchanges
* Prioritize and accomplish a wide range of tasks each shift
* Complete cash office work and count cash registers
* Train new hires on cash and customer service
* Maintained the entire department, often independently, to meet the necessary expectations of the fast paced and high customer volume business.
* Used time management skills to make sure all of my daily tasks were met.