**About Me**:

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Education  
Bachelor of Science in Computer Engineering | Brigham Young University - Idaho | Rexburg, ID Apr 2019 - Dec 2023

• 3.98/4.0 GPA  
• Tau Beta Pi Engineering Honor Society Member

What is Tau Beta Pi? The Tau Beta Pi Association is the oldest engineering honor society and the second oldest collegiate honor society in the United States. It honors engineering students in American universities who have shown a history of academic achievement as well as a commitment to personal and professional integrity.

Hello, welcome to my personal website. I hope you can learn a little bit more about me. I am a Computer Engineering student at Brigham Young University - Idaho, with a passion for finding effective solutions to problems. I have always enjoyed figuring out how things work, how they can be fixed, and how they can be improved. This is why I decided to follow my dreams, leave my country, and pursue a higher education in a field that challenges me and allows me to apply my analytical and creative skills.

My career interests lie in software development and embedded systems. I have gained experience in quality assurance, testing, and debugging software as an intern at The Church of Jesus Christ of Latter-day Saints, where I worked with a team of developers and engineers to deliver reliable and user-friendly applications. I have also acquired skills in object-oriented programming, C++, Python, JavaScript, ROS2, and embedded systems, and I am currently working on IA for an R2D2 robot using Nvidia Jetson Nano. My goal is to become a proficient and versatile software developer who can contribute to the advancement of technology and society.

**Technical Skills**

During the last years, I have acquired important skills that allow me to have a solid background in software development, embedded systems, and electric circuits. I also have been exposed to web development, FPGAs, Computer Architecture, and Quality Assurance. The following is a list of technologies, tools, and applications I have experienced working with:

* Programming Languages: Python | C++ | JavaScript| HTML
* Python is the one I feel most comfortable with because I used it for the most part of my college education. I have a solid background in:

Programming with Functions

Objects and Classes  
Data Structures  
Parallelism and Concurrency

* ROS2
* Digital System Design
* Microprocessor Based-Systems Design
* Verilog (FPGA design) and Basys3
* Arduino Uno, Raspberry Pi, Nvidia Jetson Nano
* Vivado
* LoRa
* IntelliJ IDEA
* Logisim
* Google Firestore
* Android Studio
* Jira

**Projects**

Some of the most interesting and instrumental projects I have completed are the following:

**BinBoy videogame:**

Along with another 2 classmates, we had to create an application or videogame with educational purposes for children. We decided to build a video game about the importance of recycling using pygame. We had to learn the basics of pygame and videogames physics and then use our object-oriented programming knowledge to develop the game. I personally worked most of the time on the collision system and platforms. Here is the link of the game’s github repository where you can check the code and actually try the game: <https://github.com/mcb1510/BinBoy>

**C++ User Credentials:**

The idea of the creation of this simple program was to refresh my knowledge of C++. The program contains the following C++ Syntax:

Variables

Expressions

Conditionals

Loops

Functions

Classes

Data structure from STL (List) The program allows an user to create and login into an account. The program will then store the user's credentials in a file. Here is the github repository link: https://github.com/mcb1510/Cpp-UserAccount