Clarence Adrian

ELECTRICAL ENGINEER/ PROGRAMMER

TECHNICAL SKILLS

Programming Languages:

- Verilog HDL
- Assembly (ARM, x86)
- C, Embedded C
- Python
- Arduino
- MATLAB

Hardware:

- STM32, EFM8, AT89, ATtiny85 Microcontrollers
- ARM SoC FPGA

Additional Software:

- GNU-Make (Makefiles)
- SOLIDWORKS

EDUCATION

University of British Columbia

Bachelor of Applied Science
Electrical Engineering
2017 – present

OTHER AFFILIATIONS

- Unlimited Dance Club UBC
  VP Marketing

- BBW International
  Barback/Event Staff

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TECHNICAL PROJECTS

Autonomous Ocean-Going Sailboat   Ongoing
Engineering Design Team Project - UBC Sailbot
Position: Electrical sub-team, Sponsorship/Events Coordinator

- Implemented brushless motor based on electrical specifications to maximize boat rudder actuation.

FPGA RISC Machine
Academic Project   September 2018 – November 2018

- Developed and designed a 'turing-complete' RISC machine capable of complex ALU operation, interrupts, and memory access ability, using **Verilog HDL** and **assembly**

- Utilized revision testing technologies (**git**) to debug and conduct rigorous regression tests on RISC machine through **Verilog** testbenches and waveform analysis

Heart-Rate Therapy Device   February 2019
Academic Project

- Constructed a photoelectric heart-rate detector using the **EFM8** and simple household materials: clothe peg and LED

- Programmed a visual GUI (**python**) that displays input BPM information with user-set variables

Coin-Picking Robot   March 2019
Academic Project

- Program an intelligent bot, using **python**, that can analyze the sentiment of 300,000 twitter posts with 85% accuracy

WORK EXPERIENCE

Franchise Owner, Student Works Painting
December 2017 – September 2018

- Self-managed a profitable painting franchise, leveraging skills in **marketing**, **sales**, and **employee/customer relations** to produce over 50,000 CAD in sales while maintaining a customer satisfaction rate of over 90% and a top 100 franchisee ranking

- Produced professional exterior and interior paint jobs by utilizing skills in **project management** to recruit, train and directly supervise 3 crews of 3-6 painters

VOLUNTEER EXPERIENCE

External Relations Coordinator
PERMIKA Nasional

- Manage internal funds and arrange fundraisers to accumulate operating funds and donations for national disaster victims