

# 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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clarence-adrian



ad2969



## 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** September 2018 – November 2018  
Academic Project
  - 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: clothes 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