

Philip Roman San Ramon

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SUMMARY

Senior year Computer Engineering student at Milwaukee School of Engineering. Background with computer hardware and embedded system coding projects. Skills in VHDL, Arm Assembly, Embedded Systems, Computer Architecture, wiring, circuitry, basic software development, web design, and customer support/interactions.

EDUCATION

A.S. Engineering Science | College of Lake County | GPA: 3.411 | May 2021

B.S. Computer Engineering | Milwaukee School of Engineering | GPA: 3.07 | Expected May 2024

INTERNSHIP EXPERIENCE

Lab Assistant | College of Lake County Baxter Innovation Lab | Grayslake, IL | December 2019 – August 2021

Project Objective: Work with Lab Assistant and faculty advisors, carry out lab operations, perform equipment maintenance, conduct new user training.

- Composed 3D model projects for/with engineering students.
- Advised engineering camps and workshops for passionate middle/high school students.
- Worked in collaboration with Professors to increase student involvement.
- Designed, created, and implemented projects for the lab space.

PROJECT EXPERIENCE

Single Cycle Processor

Project Objective: Develop single cycle processor that runs on an ARM Instruction Set Architecture.

- Developed processor components (Arithmetic Logic Unit and Register File) in VHDL using Intel Quartus to satisfy 5 stages of a processor: Fetch, Decode, Execute, Memory, and Writeback.
- Built single cycle processor circuit around an ARM ISA using these components.
- Translate basic ARM instructions into machine code to program an IROM to run processor.

Self-automated Fan

Project Objective: Develop automatic way of being able to cool a room that runs off an Arduino

- Programmed Arduino using C++ to control sensors and lights
- Design and print 3D customs parts
- Implement sensors and hardware onto bread board circuit

TECHNICAL SKILLS

- | | | |
|-----------------|-------------------------|-------------------|
| ▪ VHDL | ▪ Embedded Systems | ▪ Java |
| ▪ Arm Assembly | ▪ Intel FPGAs | ▪ Data Structures |
| ▪ Intel Quartus | ▪ STM32 Microprocessors | ▪ Arduino |

LEADERSHIP | CO-CURRICULAR INVOLVEMENT | COMMUNITY SERVICE

President | Kapamilya Pinoy Association | May 2022 - Present

Event Assistant | Highwood Public Library | October 2015 - 2020

WORK HISTORY

IT Services | Zion-Benton Township HS | August 2015 - May 2019 | 10 hrs/wk

Lab Assistant | College of Lake County Baxter Innovation Labs | December 2019 - August 2021 | 20 hrs/wk