Rielle Micah Quiambao

FLECTRICAL AND COMPUTER ENGINEERING . COMPUTER SCIENCE

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Summary _____

Current sophomore at Duke University double majoring in Electrical & Computer Engineering and Computer Science. Super nerd who loves Vim, Linux, and low-level programming languages. Interested in concentrating studies and future research in microelectronics, machine learning, digital systems, solid-state devices, and integrated circuits.

Education_

Duke University Pratt School of Engineering

Durham, North Carolina

Aug. 2016 - May 2020

B.S.E. IN ELECTRICAL & Computer Engineering and Computer Science

- Wilkerson Dunn Scholarship
- Lehman M. Brady Scholarship

Relevant Experience _____

Durham Academy Summer Technology Program

Durham, NC

TEACHING ASSISTANT

Jul. 2014 - Aug. 2017

- Taught basic programming using MIT's Scratch and Google's CS First program to elementary and middle school aged children.
- Promoted group collaboration, inter-team communication, and problem solving in a classroom environment.
- Aided international students with limited English proficiency using alternative teaching methods and resources.

UNC-Chapel Hill Department of Physics & Astronomy

Chapel Hill, NC

LEAD PROGRAMMER

Jul. 2015 - Aug. 2015

- Built and designed Python Kelvin-Helmholtz visualization scripts that aided in graduate research of astrophysical magnetohydrodynamics and interstellar medium.
- Utilized and implemented code from Princeton University's Athena MHD Project.

Skills____

Java Python C++ Matlab Arduino LaTeX Linux Logisim Raspberry Pi

Projects

MIPS Processor

Durham, NC

ECE 250 COURSEWORK April 2017

• Implemented concepts from course to build a fully-functional processor using **Logisim**.

Autonomous Vehicle Durham, NC

DUKE UNDERGRADUATE IEEE

• Created a prototype autonomous vehicle using a remote-control car, and camera.

• Built using Python, OpenCV, and Miniconda.

Integrated Design Challenge

Durham, NC

ECE 110 COURSEWORK

Fall 2017

Fall 2017

- Designed a robot equipped with sensing, motor capabilities, and an Xbee radio.
- · Built using Arduino and C++.

Pipelined Processor

Durham, NC

ECE 350 COURSEWORK

Spring 2018

- Designed and simulated a five-stage single-issue 32-bit processor, using Verilog HDL.
- Integrated own register file, ALU, and multiplier/divider sub-circuits.
- Used pipeline lathes, implemented bypassing, and handled hazards.