Rielle Micah **Quiambao**

Electrical 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*

B.S.E. in Electrical & Computer Engineering and Computer Science — *Anticipated May 2020*

Projects

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.

Autonomous Vehicle — *Durham, NC*

Duke Undergraduate IEEE — *Fall 2017*

- 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*

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

MIPS Processor — *Durham, NC*

ECE 250 Coursework — *April 2017*

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

Professional Experience

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 interstellar medium.
- Built scripts using Princeton University's Athena, a grid-based code for astrophysical magnetohydrodynamics (MHD).

Durham Academy Summer Technology Program — *Durham, NC*

Teaching Assistant — *Jul. 2014 - Aug. 2017*

- Taught programming basics 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.

Skills

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