Nicholas Yama

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FDUCATION

UNIVERSITY OF HAWAI'I AT MĀNOA

BS in Electrical Engineering; Minor in Physics

August 2016 | (Prospective) May 2020

GPA: 3.98

RESEARCH

LIQUID METAL RECONFIGURABLE ELECTRONICS | UH MILLIMETER-WAVE RESEARCH LAB

University of Hawaii at Manoa | Honolulu, Hawaii

August 2018 | Present

Characterization of RF response in NaOH solutions used in liquid metal technologies. Design, fabrication, and analysis of LM reconfigurable RF devices.

• Publication to be in upcoming IEEE Access, DOI: 10.1109/ACCESS.2019.2945773.

VALLEY PHYSICS IN 2D MATERIALS | LABORATORY FOR NANO AND MICRO PHOTONICS

Columbia University · City College of New York | New York City, New York

May 2018 | Present

Optical characterization of valley physics in 2D Van der Waals material nanophotonic systems.

- Including participation in Summer 2018 Columbia University MRSEC REU program
- Two publications in confrence proceedings (CLEO 2019, papers JTu2A.52 and FM4D.2)
- Three journal publications in review and preperation

MICROFLUIDICS | UH MICRODEVICES AND MICROFLUIDICS LAB

University of Hawaii at Manoa | Honolulu, Hawaii

August 2017 | December 2018

Development of a microfluidic device capable of high-throughput production of cell assays for biomedical research.

- Successful Undergraduate Research Opportunties (UROP) funding scholarship application.
- Work presented at the University of Hawaii's Fall 2018 Undergraduate Showcase.

WORK EXPERIENCE

DEPARTMENT OF ELECTRICAL ENGINEERING | TEACHING ASSISTANT

University of Hawaii at Manoa | Honolulu, Hawaii

August 2018 | Present

- Lead a weekly laboratory section for EE 160 (Programming for Engineers) and graded lab assignments
- Held weekly office hours and by-appointment meetings with students

LEARNING ASSISTANCE CENTER | TUTOR

University of Hawaii at Manoa | Honolulu, Hawaii

March 2017 | January 2019

- Tutored individuals or small groups by appointment in mathematics, physics, and chemistry courses
- Weekly professional training covering basic pedagogy and learning psychology as related to tutoring peers

DEPARTMENT OF ELECTRICAL ENGINEERING | GRADER

University of Hawaii at Manoa | Honolulu, Hawaii

January 2018 | May 2018

- Graded homework for EE 260 (Introduction To Digital Design), and assisted in creation of solution keys
- Creation of Python scripts to interface with Github for classroom and assignment management

SKILLS

PROGRAMMING/TOOLSETS/OS

 $\label{eq:continuous} $\mathsf{C} \cdot \mathsf{Python} \cdot \mathsf{SystemVerilog} \cdot \mathsf{VHDL} \cdot \mathsf{HTML/CSS} \cdot \mathsf{Windows} \\ \mathsf{MacOS} \cdot \mathsf{Unix} \cdot \mathsf{MATLAB} \cdot \mathsf{ET}_{\mathsf{F}} \mathsf{X} \cdot \mathsf{ADS/LineCalc} \cdot \mathsf{OriginPro} \\$

LABORATORY EXPERIENCE

Optics · Microfabricaiton · Photolithography 2D Materials · Image Processing · Data Analysis

AWARDS

2016	Regents Scholarship	Highest level merit scholarship offered to approximately 20 upcoming
		freshmen by the University of Hawaii.
2016	Band Achievement Scholarship	Awarded by the University of Hawaii Music Deptartment via audition to
		incoming first year students.
2019	Spectrum Warrior Scholarship	Awarded by the Association of Old Crows in partnership with the University of
		Hawaii for electromagentic spectrum research.