YuHao Guo

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EDUCATION

UNIVERSITY AT BUFFALO, THE STATE UNIVERSITY OF NEW YORK

Bachelor of Electrical Engineering *May 2019*

Master of Science, Material Design and Innovation *February 2021*

WORKING EXPERIENCE

Data Analyst Intern – SeFinity Studio Sep 2019 - Dec 2019

- Completed analysis reports using Python to make adjustment to publicity strategy based on the reports, which brought 20 % more customers compared to previous quarter.
- Collected material list and analyze the price in order to optimized the cost of the product.

Electrical Engineer Intern - United Automotive Electronic Systems Co June 2017 - Sep 2017

- Worked in the team of 7 and followed FMVSS 208 automotive standard to collect experiment data and optimize the airbag deployment under different humidity conditions.
- Committed change request for the CAN sentence of humidity sensor to company. This change request was approved by supervisor after internship.
- Collected real-world data to examine the reliability of current trip computer calibration result.

PROJECTS

Heterogeneous Material Integration Models | University at Buffalo Spring 2020

- Modeled and characterized the UV LEDs using SILVACO ATLAS framework.
- Improved the External Quantum efficiency by changing P-type materials on the semiconductors.
- Verified the direct relationship between materials hole mobility and Quantum Efficiency.

Radiative Cooling Designer (LED) | University at Buffalo Fall 2019

- Analyzed and designed high performance LED cooler with no moving part in very compact size.
- Used Ansys to simulate the heat radiation and heat convection model to optimize the heat sink chamber design.
- This cooler helped a 50 W single-die LED to pass the 72-hour extreme temperature test.

Wireless Sensor Networks | University at Buffalo Summer 2018

- Develop a time-of-fly ultra-wide-band system to locate Iphone in arbitrary place in the designated building.
- Developed both the firmware on the sensor board and IOS app on the Iphone.
- Predicted user motion and next Region-of-Interest by projecting user motion vector on to hot spot regions that have higher visitors counts.

TECHNICAL SKILLS

Computer Skills: Windows OS, Linus OS, Microsoft (Words, Excel, Power Point)

Programming Language: MatLab/Simulink/Knowledge of C++/ARM/VHDL/Python

Drafting Programs: AutoCAD/Xilinx ISE/NI Multism