Joseph Luciano

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EDUCATION

Binghamton University, SUNY | Thomas J. Watson College of Engineering and Applied Science

Master of Science in Computer Engineering

Cumulative GPA: 3.92/4.00

May 2021

Binghamton University, SUNY | Watson School of Engineering and Harpur College of Arts and Sciences

Bachelor of Science in Computer Engineering - Minors in Sustainability Engineering and Economics

December 2020

Cumulative GPA: 3.85/4.00 | Dean's List: Fall 2017 - Spring 2020

TECHNICAL SKILLS

Python

• React

JavaScript

• Linux/UNIX

HTML & CSS

• C/C++

VHDL/Verilog

Haskell

Heroku

Flask

TECHNICAL COURSES

Operating Systems Microprocessors Deep Learning for EECE Internet of Things Computer Comm and Networking Embedded Systems Design

Physics and Tech of Solar Cells Digital Systems Design

PROFESSIONAL EXPERIENCE

Intel Corporation

Full-Chip Validation Engineer

Remote

June 2021 – Present • Automated weekly regression triages with Python scripts saving at least 20 hours of debug time a week

- Implemented communication protocols in Python to construct insightful logs of interface traffic
- Built effective test infrastructure in C++ to provide model stimulus and validate architect expectations
- Cooperated with dozens of engineers across multiple departments to root cause test failures

Intel Corporation

Remote

Pre-Silicon Validation Intern

May 2020 – August 2020

- Integrated hardware monitors in SVTB for post-processing to automatically produce a log/database for checkers
- Compiled models to run regression tests and debug designs before submitting changes through Git
- Established a course for new validators on implementing UVM constructs using proprietary tools

Saab Sensis

Syracuse, NY

Systems Engineering Intern

June 2019 – May 2020

- Triaged and developed solutions for dozens of customer issues using internal documentation and tools
- Collaborated with a team of 9 engineers over Atlassian's Jira to manage workflow and communicate with customers
- Debugged customer issues with a Voice Communication Control System alongside a supplier's software engineer

PROJECT EXPERIENCE

Digital Systems Designer

Binghamton, NY

Project Lead

Roomeez

August 2020 – December 2020

- Led a team of 3 to develop 5 new features for an mxGraph JS web application to drag, drop, and simulate logic gates
- Added import and export capabilities of high-level components for reusability and composability
- Created algorithms to write and simplify the automatically generated System Verilog code
- Reported weekly progress and presented demos to faculty and students for feedback

Roadrunner II Communications Engineer

Binghamton, NY

January 2020 – May 2020

• Built a robot to follow a marked path, read QR codes, perform object detection, and avoid obstacles

• Utilized an NVIDIA Jetson Nano to run collision detection algorithms and manage an Arduino Uno for motor control

Ithaca, NY

MLH – Big Red Hacks

Fall 2018

- Created a web application that was eventually added to the Wayfair website: 'www.wayfair.com/RoomPlanner3D'
- Co-developed a way for customers view Wayfair furniture by generating a 3D living room with Babylon.JS JavaScript
- Employed GitHub to share source code in combination with Algolia to handle Wayfair's 3D modeling API