

# Joshua Silverio

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## Education

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### University of Arizona, College of Engineering

Tucson, Arizona

Bachelor of Science

Spring 2020

Major: Electrical and Computer Engineering GPA: 3.65/4.00

Minor: Computer Science

National Hispanic Merit Scholar

## Work & Volunteer Experience

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### University of Arizona Undergraduate Learning Assistant

Tucson, Arizona

Computer Programming for Engineering Applications

Spring 2018-Current

- Tutored current students on difficult concepts relating to C programming
- Learned how to demonstrate concepts in a variety of ways
- Assisted professor with grading weekly programming assignments

### Quail Run Elementary

Tucson, Arizona

After School Activities Volunteer

Fall 2016-Spring 2017

- Coached children on both basic and advanced teamwork skills relating to sports
- Organized and conducted after school sports for elementary children aged 7-13
- Collaborated with a team of coaches to manage after school activities

## Projects

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### FPGA Based Implementation of a Single Cycle Processor

Nov 2017

- Designed and developed a single cycle datapath with a partner for a subset of MIPS 32-bit ISA
- Conducted post-routing functional verification and implemented the processor on the Xilinx Artix-7 FPGA
- Conducted performance evaluation based on execution time and resource requirements for executing a sorting algorithm written in MIPS ISA on the FPGA based implementation of the processor

### Solar Oven Project

Sep 2016 – Oct 2016

- Collaborated with colleagues to design and construct a solar oven
- Developed Microsoft Excel skills to determine optimal specifications
- Analyzed price and performance data to determine most cost effective solar oven

## Skills

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**Programming Languages:** C, C++, Python, Java, Verilog

**Applications:** Microsoft Office, Visual Studios, Xcode, PyCharm, Eclipse, Vivado Design Suite

**Platforms/Other:** Mac iOS, Windows, Revision Control, Debugging