Kelvin J. De Leon

Embedded Systems Engineer

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Professional Skills

- Productive: Time management, organized, learning mindset
- Team-oriented: Patient, resilient, communicative, project management experience
- Work effectively as independent contributor and collaborative team member
- Bilingual: English, Spanish

Technical Skills

- Prog. Languages: C, C++, Perl, VHDL, Verilog, ASM, Python, Rust, Typescript, Go
- Software: Visual Studio Code, Jupyter, Vivado, Git, Keil Uvision, Obsidian, React, Node
- Operating Systems: Windows, Linux, ChromeOS, FreeRTOS, Ubuntu, MacOS
- Testing: HDL testbench, serial debugging, oscilloscopes, multimeters, multisim, GDB
- Microcontrollers: Arduino, Teensy, STM32, ESP32, PIC, RP2040, RISC-V M0sense
- Embedded Systems: SPI, I2C, DMA, FSM, RTL, ADC/DAC, PLL
- FPGA/SOC experience: Xilinx Spartan 7, Raspberry Pi, Pico-Ice, Libre Le Potato

Education

Bachelor of Science in Computer Engineering Technology SUNY Farmingdale State College, Farmingdale, NY	Expected Dec. 2023
Northeastern University, Boston, MA	2014-2018
Chaminade High School, Mineola, NY	2010-2014

Technical Work Experience

Test Technology Intern Intel Corporation, Hudson, MA July 2018-November 2018; Jan 2017- June 2017

- Assisted in troubleshooting test validation of IP for the 10 nm manufacturing milestone
- Conducted tests and analysis to achieve ATPG verification of up to 99%
- Compiled Perl and shell scripts for efficient access of necessary information for team
- Automated convergence of proxy information in Unix for a Git-controlled database

Projects

MIDI Controller

- Implemented system with Teensy 4.1 to send MIDI compliant information through USB
- Designed circuits for push buttons, rotary encoder, and piezo transducer amplifier
- Constructed firmware to trigger interrupts and run tasks based on peripherals
- Used Adafruit libraries to build GUI for oled display with I2C to track key signature

8-Bit Breadboard Computer | Personal Project

- Built an SAP-1 Computer with TTL 74LS ICs following a tutorial by Ben Eater
- Debugged, tested, and soldered components with personal equipment
- Built final product capable of running machine language code with a simple Assembly language to execute simple programs, such as 8-bit multiplication