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# **Education**

University of Nevada, Las Vegas Fall 2019

Bachelor of Science in Computer Engineering

Concentration: Software Engineering and Computer Networks

Minor in Computer Science

Dean’s list Spring 2017

# **Skills & Abilities**

**Programming Languages:**

* C++ / C / Java / Dart
* Assembly / Verilog / VHDL

**Operating Systems:**

* Embedded Linux / Embedded Systems (8-bit RISC, 32-bit ARM) / FPGA (Cyclone IV)
* Linux / Windows / RTOS

# **Projects**

**Senior Design Projects:**

* C++ & Dart Language – Mobile application, IoT devices, embedded systems, and cloud functions
* *Computer Science:* GymSpace is a mobile social fitness app built by using Flutter, which is Google’s mobile framework development, to solve the problem of the lack of motivation going to the gym by adding in a social media unlike most fitness apps.
* *Computer Engineering:* FluffyFinds is a pet tracker that is built by combining a GPS, Wi-Fi, Microcontroller, and another separate device as the door sensor which is a passive infrared sensor to detect the pet leaving. Integrated the data by making a mobile application connected to the cloud platform and is able to display the pet’s current location, checking collar detection, and the collar’s remaining battery charge.

**FPGA Projects:**

* System Verilog/ VHDL Language – Testbench, waveform simulations, RTL, & DSP
* 4-bit Slot Machine Logic block design that works like a slot machine where 4 numbers in a row is winning scenario. Used a FPGA board to display the output and used the switches to get the input
* Constructed an 8-bit processor with the ability to execute MIPS instructions that is loaded into a RAM.
* Researched DSP Coding systems: Data compression, error detection, and image manipulation.

**Arm Embedded Linux and RTOS Projects:**

* C Language – ARM Cortex with BLE and Wi-Fi enabled implantations
* Constructed an internet-enabled gateway application that communicated with sensors via BLE connection.
* Used the ESP8266 Wi-Fi Module to send data to the cloud to have a visualized sensor’s readings