**Anthony Allwood**

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**EDUCATION**

**State University of New York at New Paltz**

B.S. Computer Engineering 2019

Related course work: Digital System Design, Computer Science II: Data Structures, Microprocessor Design, Technical Communication, Circuit Analysis, Calculus II, Discrete Mathematics, Software Engineering, Embedded Systems

**TECHNICAL SKILLS**

Beginner-Intermediate in JavaScript Programming, HTML programming, CSS programming, Front-end development, Back-end development, Verilog Programming, Python programming, Java programming, Linux operating system programming, Interfacing with Raspberry Pi.

**PROJECTS**

**Gym Management System**

Gym Management system is an API established by constructing a back-end supported by Node.js express server in conjunction with implementing a MongoDB database for logging users and equipment. The front-end was supported by utilizing Vue.js open-source JavaScript framework for client-side interfacing. This web application was created with the Visual Studio Code integrated development environment.

**Google Visualization Web Application**

A Flask web server application was established in which a google visualization table was displayed on the client-side. The google visualization table contains the content from an SQLite database table that is populated by variables from a python script file.

**Soil Moisture Sensor**

A soil moisture detection system was created by establishing a functioning circuit and Python script on a Raspberry Pi3 that allows a YL-69 soil moisture sensor to take moisture content readings of a small plant every hour. The python script was modified to log the timestamp of each reading and the moisture content of each reading to an SQLite database table. Simple Mail Transfer Protocol was used to send emails to a user for each reading to notify the user that the plant is watered when the content is above the threshold and to water the plant when the content is below the threshold.

**Personal Website**

A personal website was established by creating HTML script within the Visual Studio Code text editor. Created and developed using Bootstrap CSS and Bootstrap JavaScript code.

**Android Controlled- Smart Fan** (April 2018 – May 2018)

An android-controlled temperature system was established by creating and utilizing a temperature sensor circuit involving efficient connection between various resistors, a LM35 temperature sensor, a LM324 operational amplifier array, two LEDs indicating the heating and cooling of the system, a DC brushless mini fan, and a TI Launchpad microcontroller which was programmed by constructing C code within the Keil v5 software program. Temperature was regulated using Bluetooth connectivity through mobile application.

**Remote Controlled Car** (April 2018 – May 2018)

Establishment of a mobile application that controls a car chassis in which the car portrays forward motion, backwards motion, and a brake function. A physical car chassis structure was constructed with motors and an Arduino microcontroller was used to enable motion functions for the motors through code. Use of Bluetooth module and mobile application software to establish Bluetooth connectivity.

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| **Quick Draw (**Nov 2017 - Dec 2017) |  |

Project involves using the Quartus II 15.0 (64-Bit) software program in order to establish Verilog code for a number game on the Altera DE2-115 Development and Education Board. Game involves the selection of random numbers in a sequence by two players in which the player with the higher selected value wins the game.

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**LEADERSHIP & ACTIVITIES**

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| **National Society of Black Engineers**  *Collegiate Member* |

Promoting diversity on the SUNY New Paltz campus and encouraging young aspiring students to join the engineering community.

**WORK EXPERIENCE**

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| **16 Things Kids Can Do,** *Computer Engineering/IT Intern* (May 2018 – August 2018)  20 East Broadway, Manhattan, NY 10002  • Creating and designing numerous websites and mobile applications using Javacript and CSS programming  • Creating spreadsheets and documents in order to organize essential information using Microsoft Office software  • Communicating with potential sponsors, companies, and people of influence to persuade them to join our cause  **Pelham Bay Split Rock Golf Course**, *Event Waiter* (July 2017 – August 2017)  870 Shore Rd, Bronx, NY 10464 | Jul 2017 - Aug 2017 |

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• Help set up tables, music, bars, and food for parties

• Take orders and serve food to party guests

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| **Mosholu Montefiore Community Center**, *Summer Sports Camp Counselor* (July 2017 -August 2017)  M.S 142-Baychester Ave, Bronx, NY, 10466 |

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• Set up sports related activities and programs.

• Monitor children behavior.

• Guide children through physical struggles.

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| **SUNY New Paltz Residence Life** , *Dorm Night Host*  1011 Hawk Drive, New Paltz, NY 12561 |  |

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I worked as a night host for the Residence Life Program at SUNY New Paltz. I had to observe and take note of everyone who came through the main entrance of the dorm late at night.