# Ronald Mera

Electrical Engineering BS graduate interested in software engineering

**(646) 330-7171**
**rmera1026@gmail.com**
**https://github.com/rmera1026**
**https://linkedin.com/in/ronald-mera**
**https://rmera1026.github.io**

## PROJECTS

### React Appointment Project

Created a user interface using React framework which allows users to create and delete appointments from a list of data. Sorting was implemented to order data in various forms with a search bar that allows users to quickly search for specific appointments/information.

### Wearable Device (Posture Corrector)

Worked with engineers to create a wearable device that notifies users to fix their posture. A circuit of an IMU, DRV, and vibrator motor sensor was wired with an I2C bus to communicate with one another. An API was used to allow the IMU to detect improper posture through accelerometer and gyroscope measurements. The IMU would signal to the vibrator sensor when to vibrate while the DRV would signal to the vibrator motor how much to vibrate. A Bluetooth application was used to select different vibration sensitivities.

### FPGA Board Clock

Used Quartus software to develop a Verilog code that allowed a DE-10 board to switch from military time or standard time with a function of a  switch. The DE-10 board was programmed to display time with the FPGA board's seven-segment display using modular arithmetic.

## EXPERIENCE

### **AMP & CSTEP Internship,** New Paltz, NY — *Summer Intern*

May 2019 - July  2019

Worked with a team of engineers to create prototyped water turbines using SolidWorks. Analyzed and compared initial turbine designs to expose flaws. Worked with a team of engineering interns to improve turbine design by decreasing manufacturing cost, increasing energy efficiency, and improving marine-life safety.

## EDUCATION

### **SUNY New Paltz,** New Paltz, NY — *Electrical Engineering (B.S)*

August 2017 - May 2021

Relevant Courses: C++, Calculus III, Technical Communications, Computer Simulations, Microcontroller System Design,  Electronics II, Controls System, Numerical Methods (MATLAB)

### **CUNY John Jay College,** New York, NY — *Computer Science*

August 2016 - May 2017

Relevant Courses: C++

## SKILLS

Data structures, algorithms, Object-Oriented Programming, problem solver, attention to detail, teamwork, quick learner, public speaking, presentation skills, communication

## TECHNICAL SKILLS

React, node, git, GraphQL, MongoDB, BootStrap, HTML, CSS, Engineering Equations Solver

## LANGUAGES

C, C++, MATLAB, JavaScript, Verilog, Java

## ORGANIZATIONS/CLUBS

Mentored for Alliance for Minority Participation (AMP)

Mentored for Collegiate Science and Technology Entry Program (CSTEP)

Member of Society of Hispanic Professional Engineers (SHPE)

Member of National Society of Black Engineers (NSBE)

## ACHIEVEMENTS

Dean’s List Fall 2020 semester and Spring 2018 semester in SUNY New Paltz

Reached supervisor position in Fall 2019 for campus escort job