# Justin Carew

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## EDUCATION

**Rutgers University, School of Engineering | New Brunswick, NJ**                         Graduated May 2023
*B.S. - Electrical and Computer Engineering*                                                     GPA: 3.51 (Magna Cum Laude)
**Coursework**: Digital System Design, Discrete Math, Software Engineering, Computer Architecture & Assembly Language, Linear Systems & Signals, Programming Methodology I & II, Electronics Devices, Differential Equations, Network Centric Programming, Numerical Analysis Computing, Smart Grid
**Dean's List:** Spring 2020, Fall 2020, Spring 2021, Fall 2021

## SKILLS & TECHNICAL TOOLS

**Programming Languages:** NodeJS/ExpressJS, SQLite, MATLAB, C/C++, Java, HTML/CSS/JavaScript, Python
**Skills and Technologies:** LTSpice, Quartus II, Visual Studio Code, PowerWorld, Arduino IDE, Agile Methodology
**Languages:** English, Spanish (Advanced), Portuguese (Beginner), Mandarin (Beginner)

## PROJECTS

**meleetrack (Full-stack Web App)**| *NodeJS/ExpressJS/SQLite/HTML/CSS*
- Website that allows users to search Smash Bros. Melee competitors and generate a unique graphic of the player and a description based on their stats
- The frontend was developed with HTML/CSS/JS, and the backend was developed with NodeJS as the server using a SQLite database with ExpressJS as the framework to communicate with the frontend

**Capstone Agricultural Drone** | *Arduino IDE*
- Built an RC quadcopter drone by assembling the drone frame, wiring motors to the control board, and screwing in motors to the wings of the frame
- Configure fire detection, pesticide dispenser, and soil moisture modules to the drone, programmed with Arduino IDE

**PhobGCC** | *Teensy Microcontroller*
- Replaced stock motherboard of Gamecube controller for one with open-source firmware that allows custom code to be injected in aim to solve inherent potentiometer oddity degradation effect (PODE) issues
- Desoldered pins to remove motherboard and stickbox pegs with potentiometers to be soldered back onto the new motherboard with magnets and Hall effect sensors on them instead to prevent degradation over time

## EXPERIENCE

**IT Lab Supervisor | Rutgers University Office Information & Technology, New Brunswick**      *August 2021 - Present*
- Oversee supervisor responsibilities such as opening reports and inventory for the computer labs, managing merits and infractions of consultants, troubleshooting advanced technical and network issues
- Provide the university community with courteous phone and in-person support for computing and network issues
- Programmed a spreadsheet that takes service tickets and queries them for acceptable tickets to be considered for the minimum number of sufficient tickets for the consultants' certification in phone support

## CLUB INVOLVEMENT & LEADERSHIP

**Event Coordinator** | *Scarlet Smash / Rutgers Melee*
- Coordinate with the university and venues regarding tournament logistics, fee collection, registration, and more

**Public Relations Chair** | *Rutgers West Indian Student Organization*
- Design flyers and graphics using Canva and Adobe Photoshop/Premiere Pro
- Increased engagement on Instagram posts and stories by approximately 217% on average

## AWARDS

- **Consultant of the Month** | *Rutgers Office Information & Technology*                            *November 2021*
- **2nd in Computer Problem Solving** | *FBLA States Leadership Conference*                            *March 2018*