

Cy Westbrook

North/Central New Jersey (U.S. Citizen)
March 2024

website: westbrook.cy
email: hi@cy2.me
phone: (908)-672-8948
github.com/cyfinfaza
linkedin.com/in/cy-westbrook

ECE student at Rutgers NB School of Engineering Honors Academy • GPA 4.0 **Passionate for anything involving circuits, software, stages or sound.**

Have spent a lot of time working on web development (see web portfolio: cy2.me) and live technical theater (primarily sound design and custom set-piece lighting electronics). Currently focusing on studying electronics design (embedded systems, PCB design, digital signal processing, wireless/RF), and doing work for various organizations at Rutgers University. Particularly enjoy "full-stack" design - working on the product as a whole rather than just one small piece. Looking for internships anywhere in the field of electronics/software.

Rutgers Solar Car Team (Project Manager, Electrical Lead) (2023-Present)

Team is building a street-legal solar car to compete in the American Solar Challenge (ASC). I manage timelines and make high-level decisions for the team and its technical subteams (Electrical, Mechanical, Aero). I am also working on (primarily low-voltage) electrical systems for the car, stressing skills in PCB design and low-level MOSFET logic.

Rutgers Swarm Intelligence Laboratory (2023-Present)

Under the direction of Dr. Daniel Burbano Lombana (Assistant Prof. ECE, Rutgers). I worked on building the electronics and software control APIs for a 2D motion system for simulating Zebrafish swimming patterns. Lab is studying swarm behaviors in animals like Zebrafish to find new ways of approaching swarm robotics.

Rutgers Rocket Propulsion Laboratory (RRPL) Telemetry (2023-Present)

Team builds the telemetry subsystems for RRPL rockets. I am building a new web-based ground station GUI for collecting and plotting data collected from the ground station radio. I am building new ground station hardware, and participating in the design of the team's next generation, STM32-based rocket telemetry board.

Technical Theater (2017-Present) (See: <https://cy2.me/technical-theater>)

House Sound Engineer at Sieminski Theater, Basking Ridge, NJ. Sound Crew Chief for Trilogy Repertory (Bernards Township community theater). Sound Designer for Rutgers Cabaret Theater. Have worked on dozens of live theater productions in high school, community theater, and more, including a debut workshop production at the Alvin Ailey Citigroup Theater in NYC. Work primarily on sound design and electronics for smart set pieces.

Somerset County 4-H (2018-Present)

Started and led the Computer Club (2018-2023). Lead developer for the 4-H Fair App Committee. The 4-H Fair App is a web-based mobile companion app for the 4-H Fair, including live updates, notifications, a schedule, an interactive map, clubs catalog, a scavenger hunt, ads for Fair sponsors, and more. See it live at: sc4hfair.app

RFID Global Solution Software Development Intern (2021)

Built an indoor mapping component for a national security project. My mapping system was built with Mapbox GL JS and Svelte, and integrates into RFIDGS's Visi-Trac platform. Includes interactive components for viewing information about RFID tags being tracked by the system.