

# FRANK CARDONA

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I am a highly motivated and detail-oriented Computer Engineering student with proficiency in C++, Java, and Verilog, as well as a strong understanding of computer hardware. Currently contributing to an interdisciplinary project focused on the development of an electric bicycle attachment, spanning both hardware and software aspects. I am passionate about enhancing coding skills and gaining in-depth knowledge in hardware engineering. I am aspiring to transition into the artificial intelligence industry to leverage my skill set in solving complex, real-world challenges.

## Professional Experience

June 2021 - August 2021	<b>Translator and Assistant</b> Goodloe Dental
<ul style="list-style-type: none"><li>Translator: Acted as a translator between healthcare providers and patients, facilitating effective communication and ensuring patient comfort and understanding.</li><li>Patient Care: Assisted in performing X-rays and ensuring that patients were well-informed and comfortable during the process.</li><li>Administrative Support: Managed and organized patient applications and records, demonstrating strong organizational and multitasking skills</li></ul>	

## Education

2019 - 2024	<b>Bachelor in Computer Engineering</b> Mississippi State University
<ul style="list-style-type: none"><li>Developed and tested embedded software for the new product line, using C and Assembly language</li></ul>	

## Key Skills

- Programming Languages: C++, Java, Verilog
- Circuit Design: Schematic Design, PCB Layout, SPICE Simulations
- Hardware Knowledge: Computer Components and Requirements
- Prototyping: Assembly, Testing, Troubleshooting
- Project Management: Planning, Execution, Documentation
- Circuit Design: Schematic Design, PCB Layout, SPICE Simulations
- Communication
- Spanish

## Accomplishments

May 2023	<b>Commitment Award 2023</b> MSU SHPE (Society of Hispanic Professional Engineers) at Mississippi State University
Recognized for outstanding contribution to the MSU SHPE chapter, demonstrating leadership, teamwork, and a commitment to advancing the goals of the organization.	

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# Projects

## Scientific Calculator Dissection and Reverse Engineering | January 2023 - April 2023

- Technologies Used: Circuit Analysis, Data Sheets, Schematic Design Software
- Description: Conducted a thorough dissection of a scientific calculator to understand its functionalities and hardware components. Studied data sheets and reverse-engineered the main board to gain insights into button mapping, microcontroller logic, and hardware-software interaction.

## Slone 12W Audio Amplifier Design and Construction | August 2022 - December 2022

- **Description:** Engineered a 12W audio amplifier from concept to completion. Designed schematics, ran simulations, and laid out a PCB. Ordered components and assembled the prototype, conducting rigorous tests to optimize sound quality. The project involved multiple lab sessions, from simulation to Gerber file creation, and troubleshooting.