

## **Nikhil Shokeen RAMP EXPERIENCE**

Attending the RAMP summer program was a great experience that opened my eyes to the many parts of engineering. It combined academic learning with hands-on experience and mentorship, creating an environment where I could truly explore my interests. The program started with a deep dive into a variety of topics, including sensors, optics, physics, and leadership. Initially, these subjects felt overwhelming. However, as the days passed, I began to see how these topics were interconnected in the project.

Shortly after, we took a shift to our actual research project. Our project focused on assessing the air quality index at the UMass Lowell campus, in teams of 4-5. Given my interest in computer and electrical engineering, I took on the task of managing the electronics for the project. However, there were many other jobs that created the research as a whole, similar to a workplace. My specific job was to wire a PM2.5 sensor to an Adafruit board and code it to transmit real-time data to a public dashboard. I encountered many obstacles, from wiring issues to debugging code that just wouldn't work. There were moments of frustration, but the mentorship provided throughout the program made a significant difference. My mentors were always there to guide me through the tough spots.

One of the standout aspects of the RAMP program was the partnership with our specific companies; for me Analog Devices. This collaboration gave us real-world experience and built connections that could shape my future. The professionals at Analog Devices offered mentorship that was beyond just the research. They provided insights into the engineering industry, shared career advice, and discussed opportunities for future collaboration with the company.

By the end of the program, I had gained a deeper understanding of engineering and a stronger sense of direction for my career. The experience bolstered my passion for the computer engineering field and made me realize the potential impact I could have through engineering. RAMP was a space where everyone, regardless of their background or gender, could thrive. Which helped me grow in my career.

Reflecting on my 6 weeks at RAMP, I can highly recommend it to anyone even remotely considering a career in engineering. It offers a mix of academic learning, work experience, and professional development that is hard to find elsewhere. The program has left an impact on me, and I'm excited to see where my journey in engineering will take me next