## Shelby Racca

Shelby Racca is an accomplished electrical engineer with a strong background in electrical, electronics, and communications engineering. He earned a Bachelor of Science in Electrical Engineering from the University of Texas at Tyler in 2024 and an Associate of Science in Engineering Science from Houston Community College in 2022. He has demonstrated expertise in applied radio network planning, optimization, machine learning, and project management.

Shelby's academic journey includes conducting industry-wide literature surveys and authoring research papers on IoT, along with integration of sensors with Arduino controllers for remote monitoring of oral health in at-risk patients. He also completed high-level graduate courses in robotics, IoT, and DSP random processes, earning certificates and gaining advanced knowledge in signal processing, Edge AI, and sensor integration.

During his tenure at Microwave Networks in Stafford, TX, he progressed from System Test Technician to Project Engineer, managing post-sales engineering projects and reengineering to align with customer requirements. Shelby's professional experience includes preparing comprehensive documentation packages, conducting site surveys, enhancing project efficiency and accuracy, and ensuring compliance with FCC and ETSI regulations.

Shelby's technical skills and leadership abilities were highlighted during the UT Annual Ratliff Relays, where he led and coordinated team efforts, resulting in a first-place finish for electrical engineers and second place overall. Additionally, he led a multidisciplinary structural health monitoring project, utilizing DSP, machine learning, and IoT technologies, optimizing machine learning algorithms, and presenting the project at prestigious engineering expos and conferences.

Shelby Racca's dedication to excellence, innovative mindset, and collaborative spirit make them a valuable asset in any engineering team, driving product development, enhancing operational efficiency, and contributing to organizational success.