

Professional Summary

Energetic and dedicated Computer Engineer with a solid educational foundation and a passion for technology. Recent graduate with a bachelor's degree in Computer Engineering Technology from Rochester Institute of Technology, eager to leverage theoretical knowledge and hands-on experience gained through coursework and projects to kickstart a successful career in the engineering industry. Adept at problem-solving, programming, and hardware design, with a keen interest in emerging technologies. Committed to continuous learning and growth, I am excited to contribute my skills and drive to a dynamic IT team, striving to make meaningful contributions in the ever-evolving world of technology.

Education

Bachelor of Science (B.S.), Computer Engineering Technology, Rochester Institute of Technology, 2022

Dean's List, Spring Term 2022

Relevant Coursework: Embedded Systems Design, Ethics & Documentation in Computing, Real-Time Systems & HDL, Digital Processing & System Design, Microcontroller & Electronic Circuits

Certification

Active Secret Clearance

CompTIA Security +, CompTIA Cybersecurity Analyst (CySA+) (In Pursuit)

Full-Stack Software Engineer (JavaScript)

Technical Competencies

Hardware: VHDL, FPGA (Xilinx, Vivado; Altera/Intel Quartus Prime, DE10-Standard Board), ModelSim, SPI, UART, Arduino, STM32F411, Snickerdoodle Black, SoC, Oscilloscope, Multimeter

Software: C++, C, Python, nodeJS, Visual Studio Code, Eclipse, Anaconda, OpenCV, PYQT4, HTML, CSS, stm32cube, Assembly Language, .tcl

System& Tools: Linux, Git, TortoiseSVN, MATLAB,

Professional Experience

US Army | Motor Transport Operator

09/2022 - 09/2023

Innovation Fellows | National Science Foundation

08/2020 – 12/2020

Hardware Team Member

- Led the execution of over 30 in-depth interviews with wheelchair users, extracting vital insights that steered the development of a tailored MVP focusing on user comfort and functionality.
- Engineered a cutting-edge MVP incorporating posture sensors for ergonomic monitoring, LED alerts for immediate user notifications, and motion sensors to assess activity levels, directly leveraging user insights for enhancement.
- Implemented Bluetooth connectivity to facilitate seamless data transmission to a custom GUI, elevating the user experience by offering instant feedback and interactive functionality.
- Orchestrated a comprehensive 15-minute investor pitch and interactive demo, effectively communicating the project's vision and achievements, securing its continuation by inspiring the next cohort of interns with a solid foundation for further innovation and development.

Projects

Tennis Tracker | Embedded System Designs II

01/2022 – 05/2022

- Engineered a dynamic 3D ball tracking system using stereo vision on Snickerdoodle Black with USB cameras, showcasing expertise in camera calibration with MATLAB for precise motion analysis.
- Innovated with AprilTag fiducials for spatial referencing, enhancing system accuracy through advanced blob detection and triangulation techniques for exact ball positioning.
- Played a key role in system accuracy optimization, conducting thorough analysis based on camera positioning, significantly improving measurement precision and reliability.
- Enhanced team collaboration and project management by actively participating in daily Slack meetings and effectively communicating with a multidisciplinary team to align on projected timelines and deliverables.
- Contributed to critical design phases (PDR and CDR), leveraging hardware expertise and analytical skills to advance project goals in computer vision and FPGA processing.

GitHub: <https://github.com/Jason2945>