BIRAJ KAKADIYA

Hartford, CT • 860-500-9659 • Birajpatel999@gmail.com • LinkedIn: biraj-kakadiya

SUMMARY

Robotics Engineering B.S. candidate (University of Hartford, expected May 2027) with hands-on experience in robotics, IoT, and product R&D. Built and validated portable physiotherapy devices (dual cold laser + micro-current therapy), led prototyping and compliance support, and deliver reliable technical support as an ITS student worker. Strengths include system integration (hardware + software), rapid prototyping, and clear technical communication.

EXPERIENCE

University of Hartford – Information Technology Services (ITS) - West Hartford, CT

IT Support / Student Worker | May 2024 – Present

- Troubleshoot hardware/software issues and provide frontline support for students, faculty, and staff.
- Assist with workstation setup, device provisioning, and basic network/account support.

Reyansh Technologies - *Rajkot*, India

R&D Engineer | Jan 2024 – Present

- Conduct research, prototyping, and testing for embedded and smart mobility systems involving GNSS, IMU sensors, IoT, and edge technologies.
- Support hardware/software integration, sensor testing, troubleshooting, and product development from prototype to field-ready solutions.
- Collaborate on developing reliable technology for vehicle safety, positioning, fleet monitoring, and intelligent mobility applications**.**

RegenWave Medical Instruments - Ahmedabad, India

R&D Engineer | Jan 2023 – Dec 2025

- Developed portable physiotherapy devices integrating dual cold-laser modules with micro-current therapy for pain management.
- Led rapid prototyping, bench testing, and iterative design improvements for usability, reliability, and manufacturability.
- Supported compliance and validation activities (documentation, risk considerations, test planning) and contributed to IP preparation.

TechiesMS - India

IoT Intern | May 2023 – Jan 2024

- Built IoT prototypes using microcontrollers and sensors; assisted with integration and testing.
- Supported e-commerce operations and digital listings, strengthening technical + business execution.

Indo German Tool Room - India

CNC/VMC Intern | Nov 2021 – Jan 2022

- Assisted in CNC/VMC shop operations and basic process planning; gained exposure to manufacturing workflows and quality practices.

SKILLS

- **Programming**: ROS/ROS2, C++, Python, MATLAB, Ladder Logic
- **Frameworks/Tools:** Flask, Tkinter, Gazebo, LogixPro, EasyEDA, Siemens SIMATIC, Altium Designer
- **CAD/Prototyping:** SOLIDWORKS, AutoCAD, OrcaSlicer, circuit prototyping, mechatronics integration
- **Professional:** Leadership, technical writing, presentations, teamwork, problem solving

EDUCATION

University of Hartford, West Hartford, CT
B.S. in Robotics Engineering (Expected May 2027)

- Activities: Assistive Robotics Team (ART); ASME Student Chapter (Vice President).

Ganpat University, India
High School Diploma in Mechatronics | May 2020 – May 2023

- Highlights: 3D modeling; biomaterial & multi-material 3D printing (Stratasys DentaJet™); startup grant support (Techbotic).

PROJECTS

RegenWave™ Dual Laser + Micro-Current Therapy Device

- Portable physiotherapy device; prototyping, testing, design optimization, and documentation support.

Smart Safety Stick with SOS

- Assistive device concept integrating safety and alert features.

Robotics Chef

- Mechatronics project exploring automation and embedded control.

Vine Finder

- Prototype concept for guided identification/selection support using sensors/automation.

Rover For Im3d Competition ASME

- I contribute coding and electronics

Gait Bad Posture Detection

- Using ai (MedGeamma) make right Gait Posture Diction

LEADERSHIP

Vice President, ASME UHart Student Chapter
May 2025 – Present