

RENU MEDTECH PRIVATE LIMITED

Address: Venture Center, 100, NCL Innovation Park, Dr. Homi Bhabha Road, Pune - 411008

Job Description: Engineering Intern (Mechanical / Mechatronics)

About Renu MedTech

Mission: Use *deep tech* to democratize advanced diabetes care in India and other low / middle income countries, through cutting-edge and affordable medical devices

India has 140 mn+ diabetics, 5 to 10% of which are Type 1 with a high mortality rate of 33%. India still relies on insulin injections which are painful and have a huge risk of potentially fatal glycemic fluctuation.

Medically, the best line of treatment for diabetics is the insulin infusion pump coupled with a continuous glucose monitor (CGM), which is prevalent in the West. However, in India

- This technology is prohibitively unaffordable
- Neither is it designed for India and local conditions
- Nor does insurance cover this technology unlike the developed economies

Solution:

- Use deep tech to disrupt this market with "An insulin infusion pump and a CGM", that are Made in India for the global market
- Target Price point: 1/10th of current
- Target Markets: India, followed by SE Asia, South Asia, Africa, followed by US, EU, ANZ
- Target Customers
 - o Insulin Pump: Type 1 and Type 2 (insulin dependent) diabetics
 - o CGM: Type 1 and Type 2 diabetics, Vanity users
- Serviceable Addressable Market (SAM)
 - Insulin Infusion Pump: Target Markets = \$7.5B, India = \$3B
 - Continuous Glucose Monitor: Target Markets = \$2.7B, India = \$1B

India needs a Maruti Suzuki and not a Mercedes!

Co-Founders at Renu MedTech:

- Ajay Bhagwat, Chairman and Cofounder at Renu MedTech. Founder and MD, Renu Electronics. Experienced in industrial automation, medical devices for 35 years. Insulin Pump pioneer in India. President: <u>TiE - Pune</u>. IIT-Bombay, University of Iowa.
- Vardhan Phadnis, CEO and Cofounder at Renu MedTech. 2x Entrepreneur: MedTech, eCom SaaS. Previously co-founded <u>Shoptimize</u> that was successfully acquired by <u>Graas</u>. ISB, Georgia Tech, VJTI - Mumbai.

Renu MedTech is incubated at Venture Center, National Chemical Laboratory, Pune.



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Requirements

Internship Duration: 6 Months starting Jan. 2026

Location: Pune

Eligibility: Final-year Engineering Students - Final-year Mechanical/Manufacturing Engineering

student with a Mechatronics minor (preferred).

Note: This is an on-site role.

Key Responsibilities

1. Device Prototyping & Mechanical Research

- Prototype electro-mechanical subsystems and support component design.
- Perform **mechanism validation**, tolerance checks, and assembly evaluation.
- Assess mechanical components, MEMS elements, and micro-mechanisms.

2. Mechatronics Integration

- Work with **sensors**, MEMS, mechanical subsystems, and compact electronics.
- Conduct mechanical-electronic integration testing and basic debugging.
- Support wiring, soldering, and PCB mounting for interfacing.

3. Lab-Based Experimental Work

- Perform component testing, micro-mechanism evaluation, and endurance studies.
- Run stress/strain tests, follow protocols, and maintain documentation.
- Assist with **fixture setup**, calibration, and test-rig development.

4. Component & Technology Benchmarking

- Benchmark **mechanical components**, MEMS, actuators, sensors, and assemblies.
- Compare **performance**, cost, size, and durability for wearable use.
- Research emerging miniaturized mechanical systems and MEMS technologies.

5. Collaboration With Cross-Functional Teams

- Work with **electronics**, firmware, and industrial design teams.
- Provide mechanical inputs in **design reviews** and prototype iterations.
- Participate in **brainstorming** and product improvement sessions.



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Preferred Skills, Background & Expectations

- Final-year Mechanical/Manufacturing Engineering student with a Mechatronics minor (preferred).
- Hands-on experience with mechanical components, micro-mechanisms, and MEMS-based systems.
- Understanding of electronics, sensors, and basic embedded concepts. Basic familiarity with
 PCB circuits, soldering, wiring, and breadboard setups (only as required for integration).
- Experience in testing small mechanical assemblies and performing structured experiments.
- Familiarity with CAD tools (SolidWorks or Fusion 360) is an added advantage.
- Comfort with rigorous, repetitive, and precision-heavy lab work.
- Problem-solving attitude with the ability to troubleshoot mechanical–electronic interactions.
- High discipline in maintaining lab notes, test logs, and experimental documentation.

What You Can Expect (Learning Outcomes)

- End-to-End Exposure: Experience the full journey of building a biomedical device—from concept to prototype.
- Hands-On Experience: Work directly with mechanical systems, MEMS components, sensors, and micro-mechanisms.
- **Deep Technical Learning:** Develop skills in mechanical design, MEMS, actuation principles, testing, and lab experimentation.
- **Cross-Functional Collaboration:** Work alongside engineering, electronics, firmware, and product teams in a real startup environment.
- **Career Growth:** Learn from experienced biomedical engineers and contribute to impactful Diabetes-focused medtech innovations.
- Stipend: Stipend will be as per industry standards, and we follow a five-day work week.

Our Company is an equal-opportunity employer and does not discriminate against any employee or applicant based on age, color, disability, gender, national origin, race, religion, sexual orientation or parental status.