



Mechanical Design Engineer – Product Development

Rajant Health Incorporated is looking for a **Mechanical Design Engineer**. Rajant Health Incorporated (RHI) is building a healthcare assurance ecosystem to enable proactive and personalized health. We provide personalized health insights to promote a patient-centered experience that improves diagnostics, therapeutics, and communication.

Our monitoring solutions, data integration, and advanced analytics turn raw data into actionable insights that can be applied to various clinical, biomedical, and research needs. Our premiere lineup of products includes the Cowbell, the Q-Stat, and Trovomics. Together, these versatile technologies can revolutionize health discovery through enhanced data acquisition, ingestion, and analysis. Our current applications include large animal monitoring, remote health management, and biomarker identification.

Based in Malvern, Pennsylvania, RHI is the developer of cutting-edge technology to provide on-demand health insights. RHI's intelligent products make raw data understandable and actionable for researchers, healthcare providers, and everyday users, so individuals can live better healthier lives.

Revolutionizing health discovery on a global scale is RHI's mission. RHI is backed by our parent company, Rajant Corporation (Malvern, PA), with 20+ years of technological experience. For more info, visit RajantHealth.com or follow Rajant Health on LinkedIn and YouTube.

Position Overview: As a **Mechanical Design Engineer**, you will be responsible for coming up with 3D modeling and prototype builds of electronic system assemblies, housings/enclosures, cable routing, connector placement, heat transfer solutions, mounting systems, and peripheral accessories. You will work as part of a team of talented, creative individuals passionate about developing new products with an exciting blend of expertise from mechanical, electrical, RF communications, and software/firmware domains.

This role is specifically focused on wearables and miniature devices; mechanical design and prototyping, with SolidWorks as primary CAD system and expecting innate skill and continued growth with design-for-X intuition (X including: -manufacturing, -aesthetics, -industrial design, -assembly, -ruggedness, -ease-of-use, -thermal requirements, etc.)

Common prototype part materials you'll work with include: 3D printed carbon-fiber-reinforced nylon (four Markforged FDM printers), stereolithography photo-polymer resins (multiple SLA printers), laser cut sheet materials, bent sheet metal, machined and die cast aluminum alloys.

Responsibilities:

- Design parts and assemblies using SolidWorks mechanical CAD software.
- Spearhead the mechanical design & development of new electronic device assembly models, focusing on innovation, performance, & industrial design aesthetics.
- Apply engineering principles to optimize product designs constrained by requirements for space-and-weight limitations, structural ruggedness, thermal budget, customer experience.
- Impact the entire design lifecycle, from concept through to production, ensuring designs meet functional requirements & industry standards.
- Collaborate closely with cross-functional teams, including electronics, software, & manufacturing, to ensure cohesive and efficient product development.
- Welcome mentorship from senior engineers and design team members, fostering a culture of technical excellence & innovation.

Skills:

- 3D modeling of complex parts and assemblies
- 2D drawing development, especially assembly exploded views and single part dimensional tolerance drawings
- Mechanical aptitude with prototype assembly, product testing, and 3D printing.

Required Experience:

- At least 3 years designing parts and assemblies with SolidWorks (or similar 3D CAD system)
- Portfolio showcasing past design work and/or prototype development projects
- Some experience in a hands-on technician type role and/or technical hobby. Hardware (PCs, PCBAs) experience preferred.

Education: Preference for degree in Mechanical Engineering, Mechanical Engineering Technology, Industrial Design. Related fields considered.

Employment Type: Regular, Full-Time. **Location:** Malvern, PA. Onsite. **Apply:** Send Cover letter and Resume to jointheteam@rajant.com.

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