

## Visualization Systems Engineer

EndoTheia is looking for a motivated and Visualization Systems Engineer that will be responsible for leading the development and integration of digital visualization and illumination systems for novel flexible endoscopic devices. The ideal candidate will have a passion for the development of innovative medical devices, and demonstrative experience in the design and engineering of medical devices and electrical systems all the way from concept to production.

### Key Activities:

- Lead the development of video capture, processing and illumination systems for next-generation endoscopic visualization systems.
- Develop fully custom or integrate off-the-shelf image signal processing (ISP) systems to interface with off-the-shelf CMOS image sensors according to company-developed specifications.
- Use PCB layout software (KiCAD/Eagle/Altium) to develop custom printed circuit boards and sub-assemblies for on-board and off-board visualization systems.
- Use CAD (SolidWorks preferred) to design custom enclosures and hardware integration components.
- Interface with hardware engineers to integrate electronic subsystems with engineered mechanical components.
- Work with OEMS to develop and/or debug firmware/software.
- Lead the mechanical (enclosure) and electrical (embedded system/ISP) design of capital video processing equipment according to IEC-60601 standards.
- Collaborate with outside suppliers and OEMs on the sourcing of critical components.
- Collaborate with multidisciplinary teams, including R&D, Quality Assurance, Regulatory Affairs, and Manufacturing, to ensure seamless integration of subsystems and components.
- Prepare documentation release packages, including detailed drawings, bills of material, and/or assembly procedures.
- Identify and liaise with external contract manufacturers to translate in-house prototyped devices into commercial products that can be manufactured at scale.
- Work with test engineers to verify that designs meet functional requirements through performance of engineering analyses and testing.
- Contribute to the Design History File (DHF).
- Participate in design control efforts related to risk analysis (FMEA) and design reviews.
- Participate in project planning and scheduling.
- Provide direct quality support for CAPA/Deviations/Change Control, DFMEA, PFMEA, etc.
- Other duties as determined by business needs.

### Education:

- Bachelor's or Master's degree in Mechanical, Electrical, Mechatronics or Robotics Engineering.

### Experience:

- 2+ years of engineering experience, preferably in medical devices or another highly-regulated manufacturing environment.

### Requirements

- Solid Modeling Experience in CAD (SolidWorks preferred)
- PCB Design Experience (KiCAD/Eagle/Altium)



- Experience with office productivity software (Microsoft Excel, PowerPoint, Word, Etc.).
- Strong oral and written communication and organizational skills, technical problem solving, the ability to work in teams, critical thinking, the ability to adapt to a rapidly changing environment, and desire to contribute to meaningful and innovative products.
- Proven ability to work cross-functionally to achieve business outcomes.
- Self-motivated, with ability to keep track of and prioritize multiple projects and timelines
- Must be able to multi-task, meet tight deadlines, and prioritize changing demands in a fast-paced environment.

#### Additional Desired Skills/Qualifications/Competencies:

- Familiarity with FDA, QSO, and ISO 13485 medical device regulations and standards.
- Experience working within a design controls framework (per ISO 14971).
- Knowledge of IEC 60601 (or willingness to become very familiar with the standard).
- Knowledge of IEC 62304.
- Experience interfacing with CMOS imaging systems a plus.

#### About EndoTheia

At EndoTheia, we believe that clinicians can do amazing things when empowered with the right tools, and we are developing technology that can unlock the full potential of their skill and experience to improve outcomes for their patients. EndoTheia was founded in 2018 to commercialize University-developed flexible medical device technology, and opened its doors full-time in September of 2020. Currently, EndoTheia has 7 full time employees and several consultants. EndoTheia is currently accelerating its development and rapidly growing its team.

As a member of the EndoTheia team, you will play a crucial role in designing our products and pushing them to market. For more information about EndoTheia's team and mission, visit <https://www.endotheia.com/>.

EndoTheia is an equal opportunity employer and committed to a diverse workplace. All applicants will be considered equally without regard to race, color, ethnicity, veteran status, religion, national origin, marital status, political affiliation, age, sex, sexual orientation, membership in an organization or any other non-merit factors. Employees at EndoTheia enjoy a full range of benefits including full premium coverage for health insurance, 401(k) with employer matching, flexible work-from-home options, and generous PTO and sick leave.

#### To apply

Apply online at <https://www.endotheia.com/careers> or by sending an e-mail to [careers@endotheia.com](mailto:careers@endotheia.com). Please include a resume or CV, along with a cover letter. Be sure to detail past medical device product design experience (if any). Ideal start date is August 2024, but there is some flexibility.