	Position	Job Responsibilities	Job Requirements
1	Mechanical Engineer	1. Participate in the component structure design of surgical robots, complete the design, optimization of trolleys and drive modules, as well as the selection of parts and components according to product requirements. 2. Be responsible for following up the trial production of the R&D prototypes, conduct on-site analysis of the product's technical status, and continuously optimize it to ensure the stability and reliability of the product. 3. Cooperate with electronic and electrical engineers to complete the integration of the overall structure, electrical systems and wire harnesses, realizing electromechanical integration. 4. Select standard parts for the product and draw drawings of parts and components. 5. Sort out product-related technical documents, manage the Bill of Materials (BOM) and write patents.	1. Majoring in mechanical-related fields, with a bachelor's degree or above, and having a solid theoretical foundation in mechanical/electromechanical design/transmission. 2. Possessing 5 years or more of development experience related to robot bodies or medical devices. Those familiar with the mechanical design experience of medical robots are preferred. 3. Familiar with the selection of transmission components such as reducers, encoders and gear transmissions. 4. Familiar with the quality management of medical device research and development, and able to write the Design History File (DHF) documents for research and development. 5. Having a strong sense of teamwork, being able to endure hardships and work hard, possessing good communication skills, a strong sense of responsibility and being self-motivated in work.
2	Structural Engineer	1. Be responsible for the structural design of flexible endoscopes, the selection of key materials, the confirmation of processing techniques and the product verification. 2. Cooperate with the whole machine to complete the structural design and verification of the driving components of endoscopes. 3.Be responsible for the unit verification of parts and components, mold tracking, confirmation of trial mold samples, mold acceptance and other work. 4. Collaborate with the manufacturing system to complete small-batch trial production, improve processing techniques and solve production problems. 5. Compile, draw and file design documents and process documents.	1. Bachelor's degree or above in mechanical engineering, precision instruments, optical engineering or other related majors. 2. With more than 5 years of structural development experience and over 3 years of experience in endoscope structural development, and proficient in using 3D and 2D design software. 3. Familiar with the design of precision parts for flexible instruments and acquainted with the sterilization verification process for consumables. 4. Familiar with the cutting, welding and forming processes of precision stainless steel pipes and fittings, as well as the properties and processing methods of commonly used medical materials. 5. Having a strong sense of teamwork, being able to endure hardships, possessing good communication skills, a strong sense of responsibility and being self-motivated at work.
3	System Test Engineer	1. Set up the testing environment for flexible surgical instruments, surgical robots and navigation platforms. 2. Be responsible for product functionality and performance testing, system safety regulations, EMC (Electromagnetic Compatibility), environmental and system risk testing; formulate product design verification test plans, write test protocols, complete testing work and output test reports. 3. Participate in the type inspection, clinical trials and registration process of the products and provide support. 4. Manage all technical issues during the testing process, establish issue tracking through defect management tools and promote the resolution of testing issues. 5. Participate in the technical solution review as a testing representative, provide development suggestions from the testing perspective, and ensure that all functions are testable and closed.	1. Bachelor's degree or above, majoring in computer science, electronics, communications, biomedical engineering or other related majors. 2. With more than 5 years of testing experience related to software, hardware and the overall system as well as medical device testing experience. 3. Be able to independently set up the testing environment, formulate testing plans, and develop testing tools and software. 4. Be able to execute corresponding test cases according to requirements, ensure the test coverage of requirements, and output test reports. 5. Be familiar with relevant regulations on medical devices, such as GB 9706.1, etc. 6. Have a strong sense of responsibility, be proactive, have a strong sense of teamwork and possess good communication skills.
4	Shape Perception Engineer	1. Be responsible for the design, development and debugging of electronic products, including circuit design, PCB layout and FPGA programming. 2. Cooperate with optical engineers to integrate optical sensors and electronic systems, and conduct optical path and signal debugging. 3. Use software programming languages (such as C/C++, Python, etc.) to develop testing and control software. 4. Be responsible for the testing and verification of the hardware system to ensure that the product performance meets the design requirements. 5. Write technical documents, including design specifications, test reports and user manuals. 6. Keep track of the latest electronic technologies and industry trends, evaluate and introduce new technologies to improve product performance.	1. Bachelor's degree or above in electronic engineering, computer engineering or related fields. 2. With more than 2 years of experience in electronic product development and familiar with digital and analog circuit design. 3. Proficient in using FPGA for hardware programming and debugging, and having practical product development experience. 4. Proficient in at least one software programming language, with good programming habits and code management capabilities. 5. Familiar with PCB design tools, such as Altium Designer, Cadence, etc. 6. Be able to independently conduct testing and fault diagnosis of hardware systems. 7. Have a good spirit of teamwork and communication skills, and be able to cooperate with interdisciplinary teams. 8. Have good English reading and writing abilities, and be able to read and write professional English technical documents. **Plus Items** 1. Having integration experience in optical systems or fiber optic sensors. 2. Having participated in optical path debugging and signal debugging projects, and having practical optical system testing experience. 3. Familiar with the electronic interfaces and signal processing technologies of optical sensors.

5	Software Engineer	1. Be responsible for the design, development and maintenance of the surgical robot software system, including functional modules such as image navigation, motion control and human-computer interaction. 2. Implement and optimize algorithms in an engineering way, such as surgical planning and precise navigation, to improve the precision and stability of surgeries. 3. Participate in the integration and testing of the software system, ensure the compatibility and cooperative work between software and hardware, and fix software defects. 4. Upgrade and improve the software functions according to clinical needs and feedback. 5. Write technical documents related to the software, such as design documents and test documents.	1. Bachelor's degree or above in computer science, automation, biomedical engineering or other related majors, with more than 3 years of relevant work experience in client/server software development. 2. Proficient in C++, Python and with good coding habits. 3. Familiar with the TCP/IP protocol and network programming. 4. Familiar with common algorithms, data structures, design patterns, multi-threading, asynchronous programming, distributed technology and other techniques. 5. Skilled in using client development frameworks such as QT, proficient in the MVC architecture of client development and equipped with certain architectural capabilities. 6. Good at learning, rigorous in work, possessing the spirit of delving into problems and capable of quickly learning new knowledge.
6	Image Algorithm Engineer	1. Research and optimize image acquisition, processing and analysis algorithms for specific surgical scenarios to assist in precise surgical navigation. 2. Be responsible for the development of registration and fusion algorithms for multimodal images (such as endoscopic images, CT images, etc.) to improve the recognition of diseased areas. 3. Collaborate with the robot hardware team to adapt image algorithms to bring out the best performance of the hardware, and cooperate with the software team to integrate the algorithms into the surgical control system to ensure the stable operation of the system. 4. Collect feedback from clinical doctors on the functions of surgical images, improve the algorithms based on this feedback, participate in the clinical testing of surgical robots, and ensure that the image algorithms comply with medical regulations and surgical requirements. 5. Keep track of the cutting-edge technologies of image algorithms, explore the application potential of new technologies in surgical robots, and promote the technological upgrading of products.	1. Master's degree or above in computer science, automation control, electronic information, biomedical engineering or other related majors. 2. Have a solid mathematical foundation, such as linear algebra, probability theory, numerical analysis, etc. 3. Be proficient in programming languages such as Python/C/C++, and have good coding habits. 4. Be familiar with image processing libraries like ITK, VTK, OpenCV, MITK, etc. 5. Master the principles and implementations of algorithms for image preprocessing, enhancement, segmentation, registration, and reconstruction. 6. Be familiar with CUDA/OpenCL parallel computing. It is even better if you can skillfully use OPENGL or vulkan for image rendering. 7. Have strong learning, innovation and problem-solving abilities, as well as good communication skills and a spirit of teamwork.
7	Embedded Systems Engineer	1. Responsible for the firmware development of embedded systems in medical devices, including requirement analysis, architecture design, coding implementation, debugging and optimization, testing, and maintenance. 2. Collaborate with hardware, algorithm, and testing teams to complete system integration, address technical issues during development, and ensure that product functionality, performance, and safety meet the requirements of medical regulations. 3. According to the project plan, organize and implement the detailed design of each module, conduct Code Reviews and unit testing, coordinate the writing and submission of corresponding Design History Files (DHF), and assist in the preparation of technical documents required for registration. 4. Participate in the development of modules such as motor drive, sensor data acquisition, signal processing, communication protocols (e.g., Bluetooth, Wi-Fi, ZigBee), and low-power design. 5. Track and analyze market feedback, respond quickly to and resolve various software issues reported during production or by users, continuously maintain and upgrade software functions, and manage code and document updates.	1. Bachelor's degree or above in Electrical Engineering, Automatic Control, Computer Science, Software Engineering, or other related technical disciplines, with at least 3 years of relevant work experience. 2. Proficient in C programming language, with strong experience in system design, code standards, and good programming practices. 3. Familiar with ARM architecture and common bus interfaces such as I2C, UART, RS485, CAN, and SPI, and capable of hardware debugging. 4. Prior experience in motor control development is preferred. Experience in medical device development is a plus.
8	Research Assistant	1.Develop robot planning and reinforcement learning algorithms based on differentiable simulation, including but not limited to literature review, algorithm experiment design and implementation. 2.Build and optimize software modules and algorithmic frameworks related to the research topic, ensuring code efficiency and stability. 3.Actively participate in building differentiable simulation platforms and conduct experimental validation of robot planning and reinforcement learning algorithms. 4.Regularly report research progress to the team and maintain close communication and collaboration with team members. 5.Write high-quality research reports, academic papers, and patent application materials.	1.Outstanding master's or bachelor's degree in Computer Science, Computer Graphics, Artificial Intelligence, Robotics, or related fields. 2.Strong interest in research, self-motivated, and capable of solving problems independently. 3.Proficient in C++, Python, and CUDA programming, with solid programming foundations and good coding practices. 4.Familiar with robot planning and reinforcement learning algorithms, understanding their principles, applications, and development trends. 5.Knowledge of differentiable simulation; prior project experience preferred.