

Quiet Machines Robotics Engineer Job Posting

Quiet Machines is a funded, Pasadena-based startup seeking to improve the logistics of sports videography through advances in robotics, computer vision, and artificial intelligence. It is developing and fielding autonomous robotic cameras for sports video production. The company continues to mature prototypes and research cutting edge computer vision and machine learning algorithms for automated multi-camera video production. It offers exciting opportunities for very capable and energetic engineers to innovate, solve challenging technical problems at the leading edge of various technologies, and work closely with video production professionals to field prototypes in sporting events to shape future products.

The ideal candidate will have a deep knowledge and hands-on experience in robotics or electro-mechanical systems with a strong background in controls, computer vision, and machine learning and with fluency in software development. She/he will be independent, self-motivated and able to work in small teams in an R&D environment with high-level guidance from stakeholders.

We are considering both experienced and highly skilled entry-level engineers with a background in engineering or computer science with hands-on experience in robotics systems to join our team. The candidate will:

- Develop closed-loop vision systems to control the motions of a robotic camera head to robustly and smoothly track athletes in sporting events
- Develop algorithms to autonomously coordinate one or more robotic camera heads to support live video broadcasting
- Work closely with sports broadcast professionals to ideate design changes and field-testing strategies and incorporate customer feedback to rapidly shape future design iterations for this user-driven company
- Grow and work with a small engineering team, engaging interns from local and national universities

This work will provide opportunities to brainstorm and consult with veteran robotics Ph.D. engineers with experience in industry and the space sector who currently advise Quiet Machines.

Required:

- Ph.D. or M.S. in Robotics or Computer Science, or B.S. with five-plus years of experience in Robotics
- Background in motion control and computer vision including machine learning
- Strong analytical, design, and hands-on skills in robotic systems
- Ability to conceptualize all required development stages of a robotic system, and to coordinate their execution across the team
- Proficiency in software design and fluency in C++ development, version control, and CI/CD in a Linux environment

Desired:

- Experience with programming in CUDA, Python, JavaScript, OpenCV
- Experience with machine learning frameworks (PyTorch, TensorFlow, or similar)
- UX/UI design experience for front-end development and integration
- Experience with wired (serial and CAN bus) and wireless protocols (Wi-Fi, Bluetooth, ESP-NOW, Zig-Bee, LoRa)
- Experience deploying software on target hardware
- Comfortable working outside area of expertise as required

US Work Authorization Required