QUIDICH

JOB DESCRIPTION | Computer Vision Tech Architect

[Quidich Innovation Labs](https://www.quidich.com) is a global company headquartered in Mumbai, India that pioneers customized technology solutions for Sports Broadcasts. From the outset, we have believed in the power of the story that sport tells as a tool to bring people together; and that this story best reaches fans, through the way it is broadcast. Building on this thinking, we have created various technology tools over the past five years and deployed them at tournaments such as the Indian Premier League, ICC Men's T20 World Cup, ICC Women's World Cup, and Men's FIH Hockey World Cup, to name a few.

Role

A Computer Vision Tech Architect plays a crucial role in designing and implementing advanced computer vision systems. This professional is responsible for overseeing the architectural aspects of projects, defining the technical vision, and ensuring alignment with organizational goals. This position involves a deep understanding of computer vision principles, machine learning, and software engineering, coupled with the ability to lead and mentor a team to deliver innovative and impactful solutions in the field of computer vision.

Responsibilities

- **Technical Leadership:** Leading a team of computer vision engineers and developers, providing technical guidance, mentoring, and fostering a collaborative environment. Driving the technical vision and strategy for computer vision projects, particularly in the areas of 3D object detection and multiple-camera feed processing.

- **3D Object Detection:** Leveraging expertise in 3D object detection algorithms and methodologies to design and implement cutting-edge solutions. Collaborating with the research team to integrate the latest advancements in 3D object detection into practical, scalable applications.

- **Multiple Camera Feed Processing:** Designing and implementing systems for efficient processing and analysis of multiple camera feeds in real time. Optimizing algorithms and workflows to handle large-scale data from diverse camera sources.

- **Technical Architecture:** Developing and implementing the overall technical architecture for computer vision systems, ensuring scalability, reliability, and performance. Collaborating with cross-functional teams to integrate computer vision components into larger systems. Knowledge and experience in selecting, configuring, and optimizing hardware for efficient computer vision processing. Experience in creating the entire Dev Ops setup required for the computer vision application with the ability to choose GPUs, Media Servers, etc.

- **Broadcast Software Experience:** Demonstrating experience working with broadcast software and understanding the unique challenges and requirements of the broadcast industry. Integrating computer vision solutions seamlessly with broadcast systems, ensuring compatibility and adherence to industry standards.

- **Module-Level Thinking:** Applying a modular and scalable approach to system design, breaking down complex tasks into manageable and reusable modules. Conducting thorough module-level thinking to enhance system flexibility, maintainability, and ease of future enhancements.

- **Hardware Acceleration:** Evaluating and implementing hardware acceleration solutions, such as GPUs or specialized processors, for optimizing computer vision algorithms. Collaborating with hardware engineers to ensure seamless integration between software and hardware components.

- **Research and Development:** Staying abreast of the latest trends, research, and advancements in computer vision, particularly in the domains of 3D object detection and camera feed processing. Contributing to R&D efforts to explore and implement innovative solutions, considering hardware constraints and opportunities.

- **Collaboration and Communication:** Collaborating with cross-functional teams, including hardware engineers, software developers, and researchers, to ensure seamless integration of computer vision components. Communicating technical concepts effectively to both technical and non-technical stakeholders.

Required Skills and Competencies

- Bachelor's/Master's/Ph.D. degree in Computer Science, Electrical Engineering, or a related field.
- 5-6 years of hands-on experience in computer vision, with a focus on 3D object detection and multiple-camera feed processing.
- Total 8-10 years experience, 3-4 years leading the technical architecture setup in a CV organization
- Must know End-to-end technical architecture, Triangulation, 3D object detection, broadcast experience, and multi-camera feed processing.
- Proven experience in designing and implementing technical architectures for computer vision systems.
- Strong programming skills in languages such as Python, and C++, and familiarity with relevant frameworks (OpenCV, TensorFlow, PyTorch).
- Experience with hardware acceleration, GPU programming, and parallel computing.

- Knowledge of hardware selection, configuration, and optimization for computer vision processing.
- Previous experience in a leadership or architecture role is a plus.
- Experience working with broadcast software and understanding of the broadcast industry's unique requirements.

Location: Mumbai
Reporting To: Head of Product
Joining Date: Immediate to 30 Days

Interested candidates, please send your CV to careers@quidich.com