

# techolution

{AI done right}

Ready to revolutionize the future of visual technology? Join Techolution as a **Computer Vision Intern** and dive into the cutting-edge world of AI-powered image analysis! You'll be at the forefront of developing innovative solutions that transform how machines perceive and interpret visual data. Working alongside industry experts, you'll gain hands-on experience in state-of-the-art computer vision techniques, contribute to real-world projects, and help shape the next generation of intelligent systems. If you're passionate about pushing the boundaries of visual AI and eager to make a lasting impact in this rapidly evolving field, this internship is your gateway to an exciting career in computer vision!

**Designation:** Computer vision Intern

**Location:** Hyderabad, India

**Employment Type:** Full Time

**Expertise:** Intern

## Key Responsibilities

- Develop and implement cutting-edge **object detection** algorithms to enhance robotic vision capabilities, improving accuracy and efficiency in industrial applications.
- Create and maintain advanced AI models for computer vision applications, enhancing the performance and capabilities of robotic systems.
- Optimize **real-time vision pipelines** utilizing **PyTorch** and **OpenCV**, ensuring seamless integration with robotic systems for faster processing and decision-making.
- Conduct comprehensive **camera calibration** procedures and implement precise **coordinate transformations** to enable accurate 3D perception in diverse environments.
- Design and execute sophisticated **pose estimation** techniques to facilitate advanced robot manipulation tasks, enhancing overall system versatility.
- Collaborate with cross-functional teams to **implement robot kinematics** and **grasp planning** algorithms, optimizing robot performance in complex manipulation scenarios.
- Utilize **ROS** (Robot Operating System) to develop modular and scalable software components for robotic vision applications.
- Integrate computer vision solutions with **GCP** (Google Cloud Platform) for efficient data processing and model deployment in cloud-based environments.
- Demonstrate strong **ownership** by taking initiative in project tasks and continuously improving vision system performance.
- Apply a **seeker mindset** to stay updated with the latest advancements in computer vision and AI, proposing innovative solutions to complex challenges.
- Maintain **exemplary work ethics** by adhering to high-quality code standards and providing comprehensive documentation throughout the development process.

## Foundational Skills

- **PyTorch:** Proficiency in developing and optimizing deep learning models for computer vision tasks, enabling efficient training and deployment of AI solutions
- **OpenCV:** Expertise in utilizing this powerful library for image processing, feature detection, and real-time computer vision applications
- **ROS (Robot Operating System):** Familiarity with developing and integrating modular software components for robotic systems, ensuring seamless communication between different modules
- **Camera Calibration:** Strong understanding of camera calibration techniques to ensure accurate 3D perception and measurements in various environments
- **Coordinate Transformations:** Ability to implement and work with different coordinate systems, crucial for integrating vision data with robot control systems

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- **GCP (Google Cloud Platform):** Experience in leveraging cloud resources for scalable computer vision solutions and data processing
- **Object Detection:** Proficiency in developing and implementing state-of-the-art object detection algorithms for robotic applications
- **Pose Estimation:** Skill in designing and applying pose estimation techniques for advanced robot manipulation tasks
- **Robot Kinematics:** Understanding of robot kinematics principles and their implementation in vision-guided robotic systems
- **Grasp Planning:** Ability to develop algorithms for efficient and stable robotic grasping in various scenarios
- **Ownership:** Demonstrated ability to take initiative and responsibility for assigned tasks and projects
- **Seeker Mindset:** Passion for continuous learning and exploring new technologies in the field of computer vision and robotics
- **Passionate Towards Work:** Genuine enthusiasm for developing innovative computer vision solutions for robotic applications
- **Extremely Ambitious:** Drive to push boundaries and achieve exceptional results in computer vision projects
- **Unbeatable Work Ethics:** Commitment to maintaining high standards of professionalism, reliability, and quality in all aspects of work
- **Ability to Comprehend:** Skill in quickly understanding complex technical concepts and applying them to practical problem-solving in computer vision

## Advanced Skills

- **FastAPI:** Demonstrated expertise in developing high-performance APIs for seamless integration of computer vision solutions with diverse systems
- **MongoDB:** Proven proficiency in utilizing NoSQL databases for efficient storage, retrieval, and management of vision-related data
- **React:** Comprehensive understanding of front-end development principles for creating intuitive and responsive user interfaces for vision system monitoring and control
- **JavaScript:** Advanced proficiency in leveraging JavaScript to enhance web-based applications related to computer vision projects, ensuring optimal functionality and user experience
- **TypeScript:** Extensive experience in implementing TypeScript for developing robust, scalable, and maintainable code in large-scale vision applications, promoting code quality and reducing errors

## How to Apply

If you are passionate about leveraging AI technologies to create impactful solutions and meet the qualifications listed above, we invite you to apply for this exciting opportunity by sharing your [video resume](#). We look forward to hearing your story and exploring how your skills align with the goals of our team. As an equal opportunity employer, Techolution celebrates diversity and is committed to creating an inclusive environment for all employees.

## About Techolution

At Techolution, we specialize in building custom AI solutions that deliver innovation and drive measurable outcomes for enterprises worldwide. With our specialized expertise we help businesses take AI from their labs into the real world.

## What We Do

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As your one-stop shop engineering firm, Techolution guides you from ideation to ROI realization. We ensure real-world AI success by minimizing R&D risks for our clients with our innovative fixed-bid pricing model.

## Our Unique Value Proposition

- **White Glove Service:** From Ideation → Innovation → Integration, we lead the way to deliver meaningful outcomes, enabling your team to operate AI solutions independently.
- **Human-AI Partnership:** Our Govern Guide Control (GGC) framework ensures responsible AI governance, aligning solutions with your organizational requirements and brand identity.
- **Customized AI Solutions:** We tailor AI to your enterprise needs, delivering from concept to implementation with our turnkey approach at a guaranteed price.

## Our Impact

Techolution has partnered with **300+ clients** worldwide, including **50+ Fortune 500 companies**. Our growing team works across diverse sectors such as healthcare, education, retail, media, tech, banking, fintech, government, telecom, and manufacturing. Celebrating **9+ years** in business, we are committed to AI Done Right!

## Awards & Recognition

- **2024:** Forbes publishes the best-selling book by our CEO, "Failing Fast?: The 10 Secrets to Succeed Faster."
- **2023:** AI Solutions Provider of the Year - AI Summit
- **2022:** Best in Business Award - Inc. Magazine
- **2021:** Best Cloud Transformation Consulting - CIO Review
- **2019:** Inc. 500 Fastest Growing Company Award

## Take a Look At Our Accelerators

- [Enterprise LLM Studio](#)
- [AppMod.AI](#)
- [ComputerVision.AI](#)
- [Robotics and Edge Device Fabrication](#)
- [RLEF AI Platform](#)

## Some Videos You Wanna Watch!

- [About Techolution](#)
- [Transform Customer Service with Techolution](#)
- [GoogleNext 2023](#)
- [Conversational AI for Enterprise](#)
- [Realytics AI Success Story](#)

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