Capsquery hosts an Object Detection Workshop for Real-Time Vision Technology powered by Al.

Go Live with Al Vision: Object Detection Workshop by Capsquery.



Houston, Texas Jul 24, 2025 (<u>Issuewire.com</u>) - Many teams attempt to develop real-time computer vision applications, but they often encounter difficulties when integrating AI with browser-based systems. This makes it challenging for them to facilitate AI Development solutions such as helmet detection, traffic monitoring, or smart surveillance.

Capsquery has decided to solve this issue. They have created a full-stack workshop that focuses on real-time vision apps. The workshop is built for speed and clear understanding. It helps teams build projects that are ready for deployment.

This workshop teaches you:

Object Detection and Real-Time Vision in Traffic Surveillance

During the workshop, a trainer will explain how object detection can be implemented in live traffic systems:

- Recognize and classify vehicles
- Read license plates on the move
- Real-time alerts for traffic violations and roadblocks
- Stay on top of flyovers, crossings, and accident hotspots
- Integrate vision data into city dashboards or control centers

Object Detection in Real-Time Inventory Management

The workshop also explores how object detection improves inventory and product tracking in warehouses or retail outlets:

- Utilize live video feeds to count stock automatically
- Streamline your inventory management with real-time updates
- Detect misplaced, damaged, or missing items
- Handle and sort warehouse materials more accurately
- Keep an eye on the locations of products to prevent theft or loss

This benefits e-commerce businesses, logistics teams, and retailers managing dynamic inventories.

This is not just AI training. This is about building something real.

About us

Capsquery is a <u>custom web development company</u>. They work with clients in the USA and India. The company has now announced a hands-on Object Detection Workshop. This session will focus on real-time vision technology powered by AI.

The session is designed for developers, technical teams, and business groups, teaching them how real-time AI inference and computer vision can enhance safety and automation. The primary focus is on traffic surveillance and smart monitoring systems.

Services Offered

Capsquery is a synergy of execution and innovation. They provide development services which are beneficial to startups as well as big corporations:

- Website Development
- Web Application Development
- Mobile App Development

- Al Integration
- LLM Integration
- Al Chatbot
- Plugin Development
- Python Development

These services indicate that Capsquery carries great experience in AI-related projects. They know how to operate on real-time data, machine learning and process on the browsers.

Inside the Workshop: Tech That Powers Real-Time Object Detection

The participants will be able to work with practical object detection systems. The workshop is grounded on a production-ready technology stack, which consists of:

Frontend Stack:

- HTML, CSS, JavaScript Used for building the user interface and managing user interactions.
- WebRTC This is used to access live feeds of webcams within the browser.
- Socket.IO This is implemented to achieve a two-way communication between the client and the server.

Backend Stack:

- Python (Flask + Flask-SocketIO) Handles the video frames in real time as a WebSocket server.
- OpenCV (cv2) Reads frames and encircles found objects with bounding boxes.
- YOLO (Ultralytics) Uses a pre-trained deep learning model to conduct object detection.
- NumPy Manages the processing of image data and storing it in arrays.
- Base64 Encoding Transfers the processed frames as strings of data via sockets.

By utilizing this comprehensive workflow, attendees will learn how AI can detect helmets, boxes, vehicles, or other custom objects with minimal delay. The session bridges theory with real-world implementation. Teams will leave the workshop equipped with the knowledge to build scalable, real-time AI systems.

Who It Benefits

This workshop is helpful for:

- Startups that want to test new AI product ideas or create minimum viable products in the vision tech field.
- Enterprises that need real-time monitoring systems for logistics, safety, or city infrastructure.
- Developers and tech leads who want to set up object detection in live environments.
- Government and city bodies that are building next-generation traffic and surveillance systems.

From detecting helmets to recognizing number plates, Capsquery's real-time AI tools help solve real monitoring and safety problems. These tools support smart city development and real-time data analytics.

Solving Real Problems with Al Vision

Traffic surveillance is the primary focus of this workshop. However, the same technology also addresses many other real-world issues. Capsquery's workshop covers:

- **Helmet Detection** Find motorcycle riders who are not wearing helmets.
- License Plate Recognition Track vehicle number plates automatically.
- **Vehicle Classification** Determine the type of vehicles that are passing.
- **Speed and Violation Detection** Determine cars that exceed speed limit or drivers who run a red light.
- Accident Detection Detect the sudden stop or collision to respond quickly.

That is the way this system works:

- The browser supports the live-streaming of video by the camera.
- OpenCV and NumPy are used to process the video frames.
- The YOLO model identifies objects in real-time.
- Bounding boxes surround the objects. Alarm messages are issued when necessary. The information can be deposited or exchanged with authorities.

This system is flexible. You can use it for helmet detection, toll booth automation, or even crowd monitoring. The workshop provides you with the base code and the knowledge to customize the AI model for your specific needs.

Quotes

"Real-time object detection is not just a concept anymore. It is now used in smart cities, retail systems, and safety applications. We want to put this technology into the hands of the builders," said Ramesh Prasad, Director at Capsquery.

"We are bringing AI, computer vision, and full-stack development into one session. Teams won't walk out with just slides—they will leave with something that actually works," said Ananda Gupta, AI Analyst at Capsquery.

Company Info (Boilerplate)

Capsquery started on August 18, 2020. The company focuses on custom web development. They build websites, mobile apps, Wagtail Development, WordPress plugins, and Al-powered solutions. Their headquarters are in India, but they also serve clients in the USA.

As a <u>Laravel Development Company in Louisiana</u>, Capsquery also possesses strong skills in Django CMS development, real-time systems, and API or WordPress plugin development. Many eCommerce website owners and SaaS companies choose them for <u>Web Design Services in the USA</u> or to scale their digital products.

Call-to-Action

Want to experience real-time AI vision in action with <u>info@capsquery.com</u>?

Join Capsquery's Object Detection Workshop. Learn how to build scalable Al-powered monitoring tools.

Visit us at https://capsquery.com/ to know more about our offerings.

It's time to act now and join the workshop led by Capsquery, beginning to transform your life and ease your journey to a safer tomorrow.





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Source: Capsquery Private Limited

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