

Multi Surveillance

System Flow:

- Raspberry Pi Hardware: The system is hosted on a Raspberry Pi, serving as the hardware platform.
- MERN Stack: The Raspberry Pi hosts a MERN (MongoDB, Express.js, React, Node.js) stack, which forms the backbone of the system.
- Web Interface: The MERN stack serves a web interface built with React and Express.js, allowing users to interact with the system.
- User Interaction: Users interact with the web interface by sending requests and interacting with the system's features.
- Database Operations: The MERN stack interacts with a MongoDB database for data storage and retrieval.
- Face Recognition: The system includes Face Recognition capabilities powered by the face-api.js library, enabling it to identify faces from images or videos.

Key Features:

- Face Recognition: The system can recognize faces in images or video streams, making it suitable for various applications, such as security, access control, or user authentication.
- User-Friendly Web Interface: The web interface offers an intuitive and user-friendly experience, allowing users to easily interact with the system.
- Data Storage and Retrieval: Data collected and processed by the system is stored in a MongoDB database, ensuring data persistence and accessibility.
- Scalability: The use of the MERN stack allows for scalability and flexibility, making it possible to add new features or expand the system's capabilities as needed.
- Real-Time Updates: The system can provide real-time updates and responses to user requests, enhancing its responsiveness and usability.
- Hosted on Raspberry Pi: The system's deployment on a Raspberry Pi makes it cost-effective and energy-efficient, suitable for various embedded or edge computing applications.
- Customization: The modular architecture of the system enables customization and adaptation to specific use cases and requirements.