Viulib® (Vision and Image Utility Library) is a set of libraries designed for rapid prototyping of advanced computer vision, machine learning and artificial intelligence solutions. Viulib® reduces development time, facilitates technology validation, supports multiplatform integration and enables transparent licensing schemes.

Vicomtech has combined in Viulib® a collection of algorithms and software development techniques to produce a flexible framework, ideal to create computer vision solutions tailored to your market needs.

**Features**
- Deep Learning-based computer vision
- Image and video analytics
- Real-time operation
- Multi-platform/multi-OS
- C++ implementation
- Compatibility with CPU/GPU architectures
- Optimisation for embedded systems
- Modular architecture and simplified dependencies

**Application Domains**

**Advanced Driver Assistance Systems**
- Lane Detection and Modelling
- Vehicle Detection and Classification
- Traffic Sign Recognition
- Pedestrian Detection
- Driver Status Monitoring
- Simultaneous Localisation and Mapping (SLAM)

**Smart Infrastructure**
- Non-Intrusive Vehicle Counting and Classification
- Traffic Understanding and Early Event Detection
- People Behaviour Tracking
- Multi-camera Analysis for Large Infrastructures
- 3D Inference Based on Perspective Analysis

**Safety and Security**
- Anomaly Detection in Critical Infrastructures
- Real-time Face Recognition
- Individual Re-identification Using Body Features
- Semantic Analysis for Complex Event Detection

... and much more!