Driver Behaviour Analytic:

| **Product code** | CZK-DBA |
| --- | --- |
| **Hardware Platform** | Edge: Nvidia Jetson Series, Sophgo Micro Servers  Central: Nvidia H100, L40, RTX 4000 Series, RTX 5000 Series Ada, A16, A30, Sophon AI server |
| **Operating System** | Ubuntu, MS Windows |
| **Management Interface** | Web-Based Management Software |
| **Database** | PostgreSQL |
| **Development Approach** | Microservice, containerized |
| **Frontend** | React |
| **Backend** | Python |
| **3rd party Integration** | 3rd Party API Integration  Camera Support: RTSP, ONVIF |
| **Keywords** |  |

**Distracted Driving Detection**

* **Identifies drivers using mobile phones, eating, or looking away from the road.**
* **Sends real-time alerts to fleet managers for corrective action.**
* **Reduces accident risks caused by inattentive driving.**

**Drowsiness & Fatigue Monitoring**

* **Analyzes driver facial expressions and head movements for signs of fatigue.**
* **Provides automated alerts to prevent accidents due to drowsiness.**
* **Helps optimize driver shift schedules based on fatigue data.**

**Seat Belt Compliance Monitoring**

* **Ensures drivers and passengers wear seat belts.**
* **Sends alerts when seat belt violations are detected.**
* **Helps public transport operators comply with safety regulations.**

**Driver Identity Verification (Dynamic Face Recognition)**

* **Uses facial recognition to verify drivers before vehicle ignition.**
* **Ensures only registered personnel access company/public transport vehicles.**

### **Key Benefits:**

* **Improved Passenger Safety – Reduces the risk of accidents due to distracted or reckless driving.**
* **Enhanced Driver Performance – Monitors and corrects unsafe driving behaviors.**
* **Lower Accident Rates – Prevents collisions and traffic violations through proactive monitoring.**