



Demokratizálhatja-e az AI a Driver Monitoring megoldásokat?

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PROBLEM

Fatal accidents caused
by human distraction



ROAD SAFETY IN THE EU



25,300
fatalities



135,000
seriously injured people

roboGaze SOLUTIONS



1. Recognition: 99,38% accurate face recognition
2. Fatigue: Multi-factor driver drowsiness tracking
3. Responsibility: Real-time driver alertness detection

USP- Democratization of DMS



LOW COST, ONBOARD

Algorithms can operate in low resource environment
(low resolution camera, Raspberry Pi + Movidius)

AI DRIVEN

Analytics and predictions are supported by deep
learning algorithms

REAL-TIME

Cutting edge technology offers real-time solution
fit for IoT

AUTOMOTIVE GRADE

roboGaze platform matches automotive industry
standards

State Of The AI enables DMS broader usage

New, easier ways to implement and teach - Tensorflow - Adanet

No need to reinvent the wheel

Full training databases, well pre-trained models

Clever ordering of components – edge advantage

Easy to prototype ideas

Mature AI frameworks enable faster go2market

No need for maintenance old
solution

Smaller team is enough to handle
the development

Cost efficient development coast

Can benefit the agile - lean way

Faster more iterative development

Our solution

Using cascade
detection &
neural network
simultaneously

OpenVINO for
the hardware
optimization

Running on a
Raspberry PI
or equal

No need for
special camera

THANK YOU FOR YOUR ATTENTION!

DEMO

EU REGULATION



European Commission is set to revise the General Safety Regulation 661/2009 and the Pedestrian Protection Regulation 78/2009 in 2018. These regulations represent the most direct and effective measures the EU has in order to further reduce road deaths and injuries.

PRIORITY TECHNOLOGIES THAT ETSC REQUIRES

- **Distraction and fatigue**
- **Alcohol Interlocks**
- Seatbelt Reminder
- Intelligent Speed Assistant
- Lane Keeping Assistance
- Automated Emergency Braking
- Event Data Recorders

Gaze tracking and real-time computer vision technology supports numerous use cases