

# InnerEye Sense Plus Braintech Solution

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Technology Solution Division  
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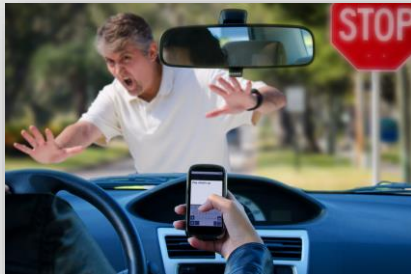


# Minded AI for Mobility

Solution to provide safety, security, comfort, and enjoyment for Automotive industry

## Safety Monitoring

Dangerous scene/  
Sleepiness Detection



## Driver's States Monitoring

Concentration Level  
Stress Level



## Entertainment experience

Music, Games,  
Recommendation



# Emotion Analysis

Senses Plus product enables measurement and monitoring of user's cognitive and emotional states.

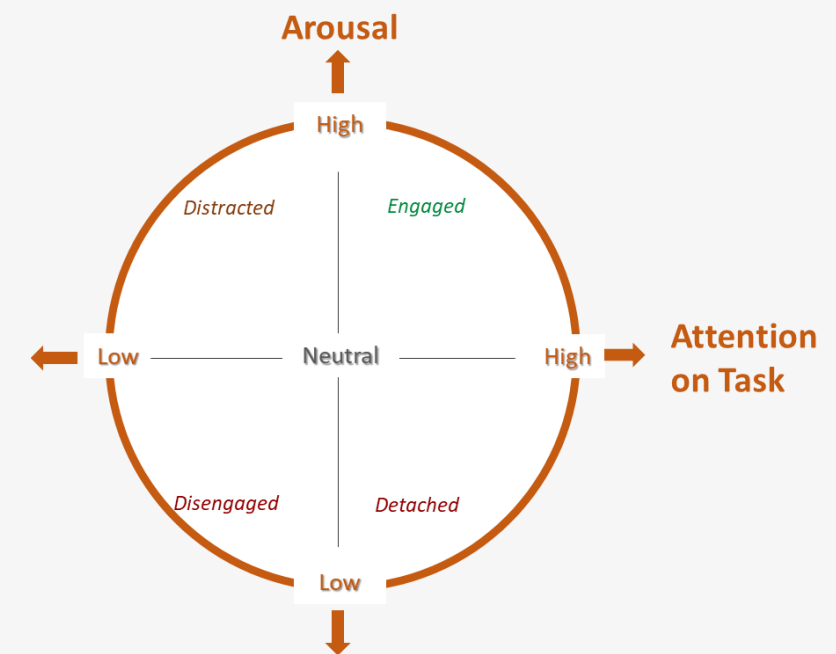
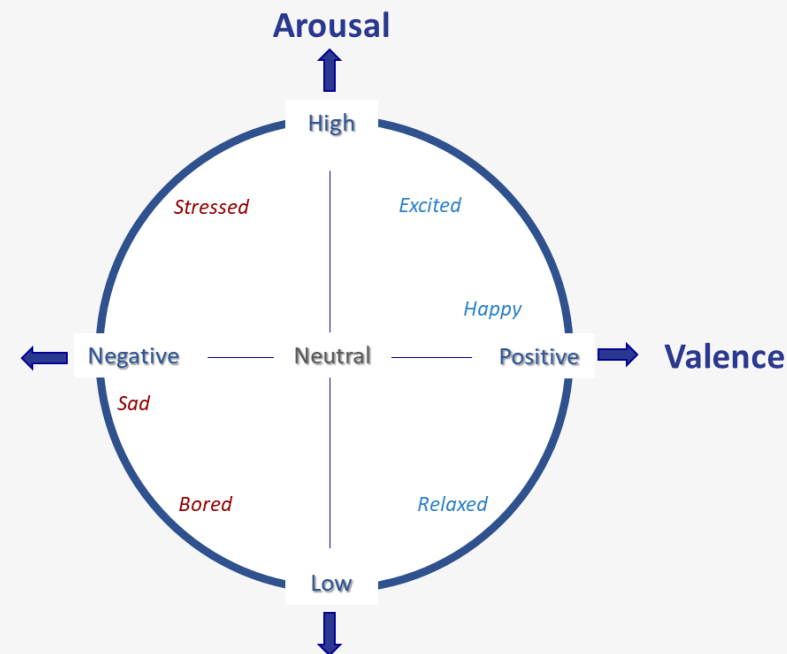
The states include primary states which are direct outputs of physiological signal classifiers, and secondary states which are combinations of the primary states.

## Primary States

1. Concentration
2. Attention-On-Task
3. Wakefulness
4. Arousal
5. Valence

## 2<sup>nd</sup> States

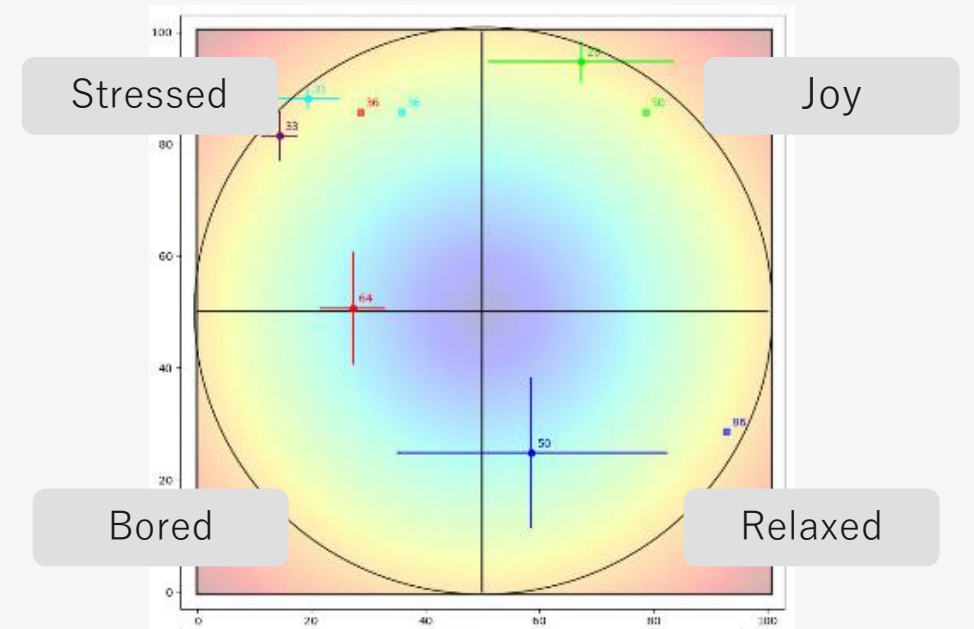
- Stressed vs. Relaxed
- Excited vs. Bored
- Happy vs. Sad
- Engaged vs. Disengaged
- Distracted vs. Detached



# PoC Case Study – Emotions States

## Cognitive States / Emotions Analysis

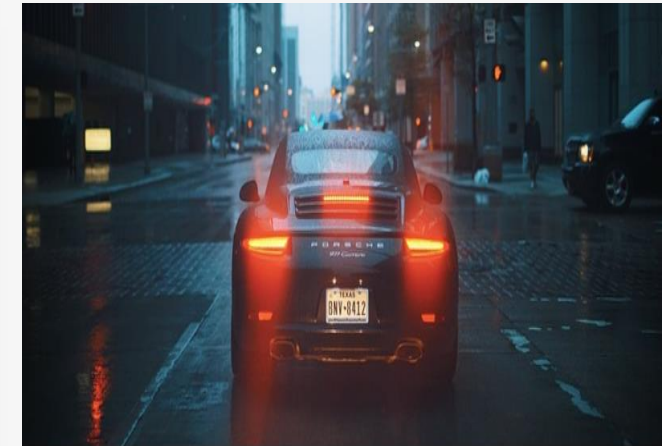
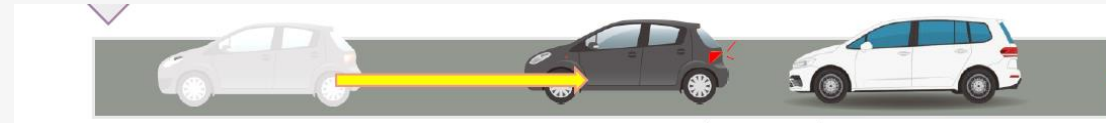
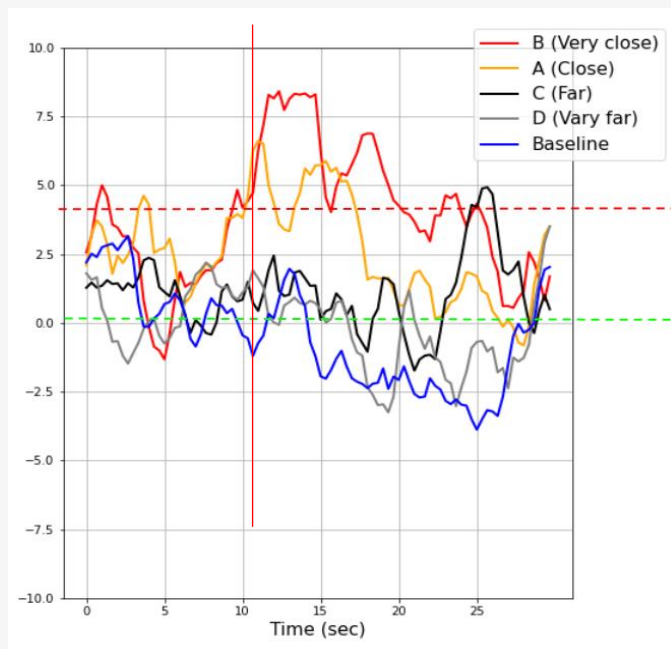
Focus level, emotions, sleepiness detection



# PoC Case Study – Danger / Safe Detection

Driver's reaction by distance of other cars (safety and danger points)

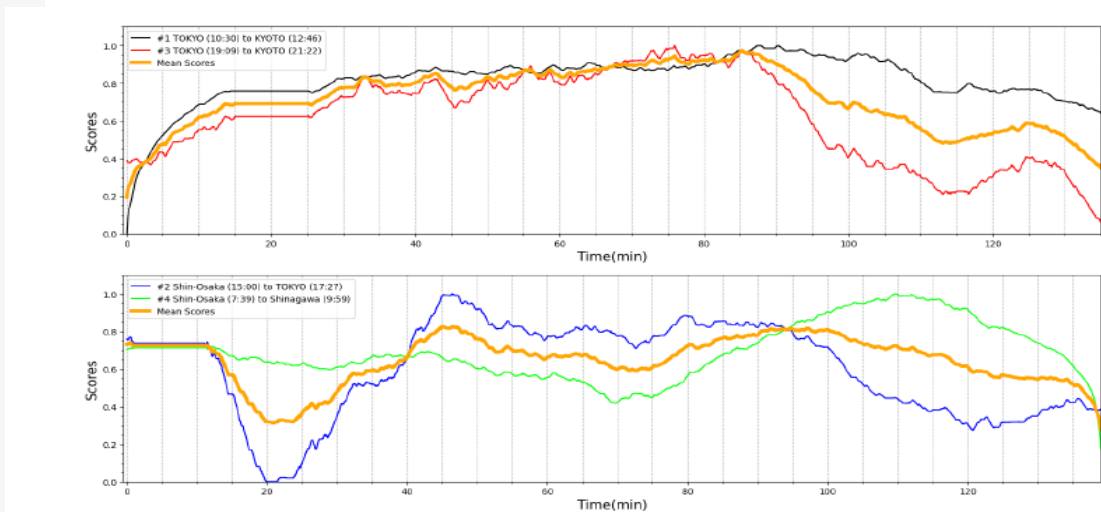
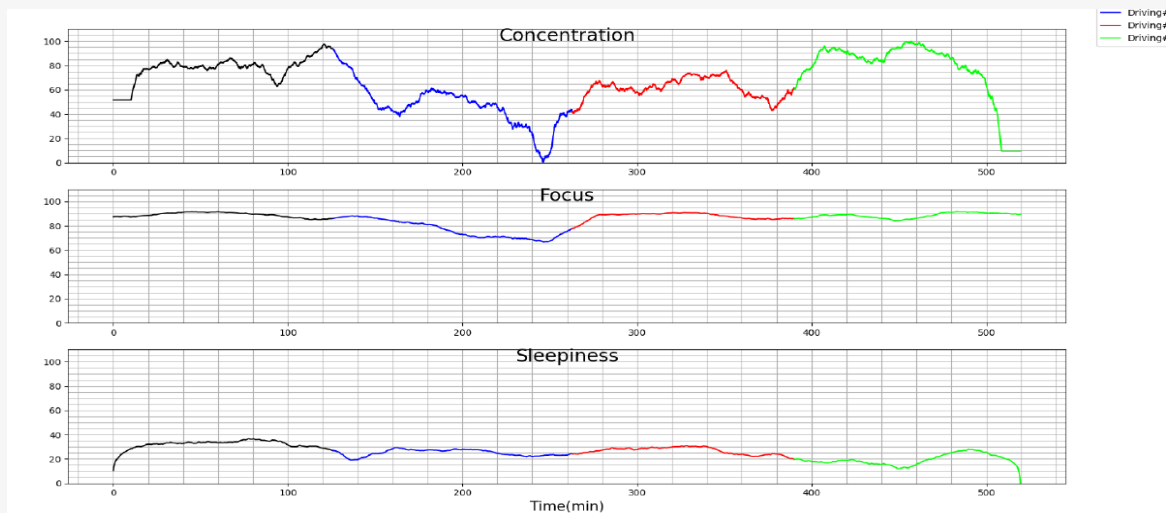
Watch 5 types of simulation video and analyze how driver reacted



# PoC Case Study – Sleepiness Detection

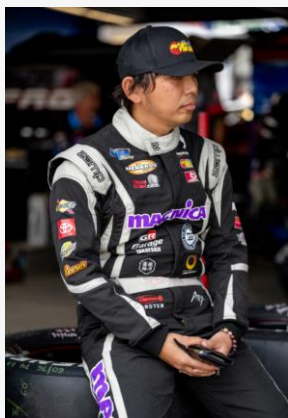
Train driver's « sleepiness detection »

Analyze and identify precisely at which moment drivers start feeling sleepy.



# PoC with NASCAR

Brainwaves data collection with a racing car (extreme condition)



# Case Studies



## Sense Plus Cognitive States Emotion Analysis



AVAS Sound Recognition



Sound Affection



Classification AI



Safety/Danger Analysis



Surgery Focus Level



## Senseel Visual Inspection AI Model



Composition Classification



Airport Luggage Inspection



LCD Inspection



X-Ray/MRI Inspection



Manufacturing Equipment AI



Remote Diagnosis





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