

ADAS

STATE OF THE ART AND EMERGENT TECHNOLOGIES

André Lourenço

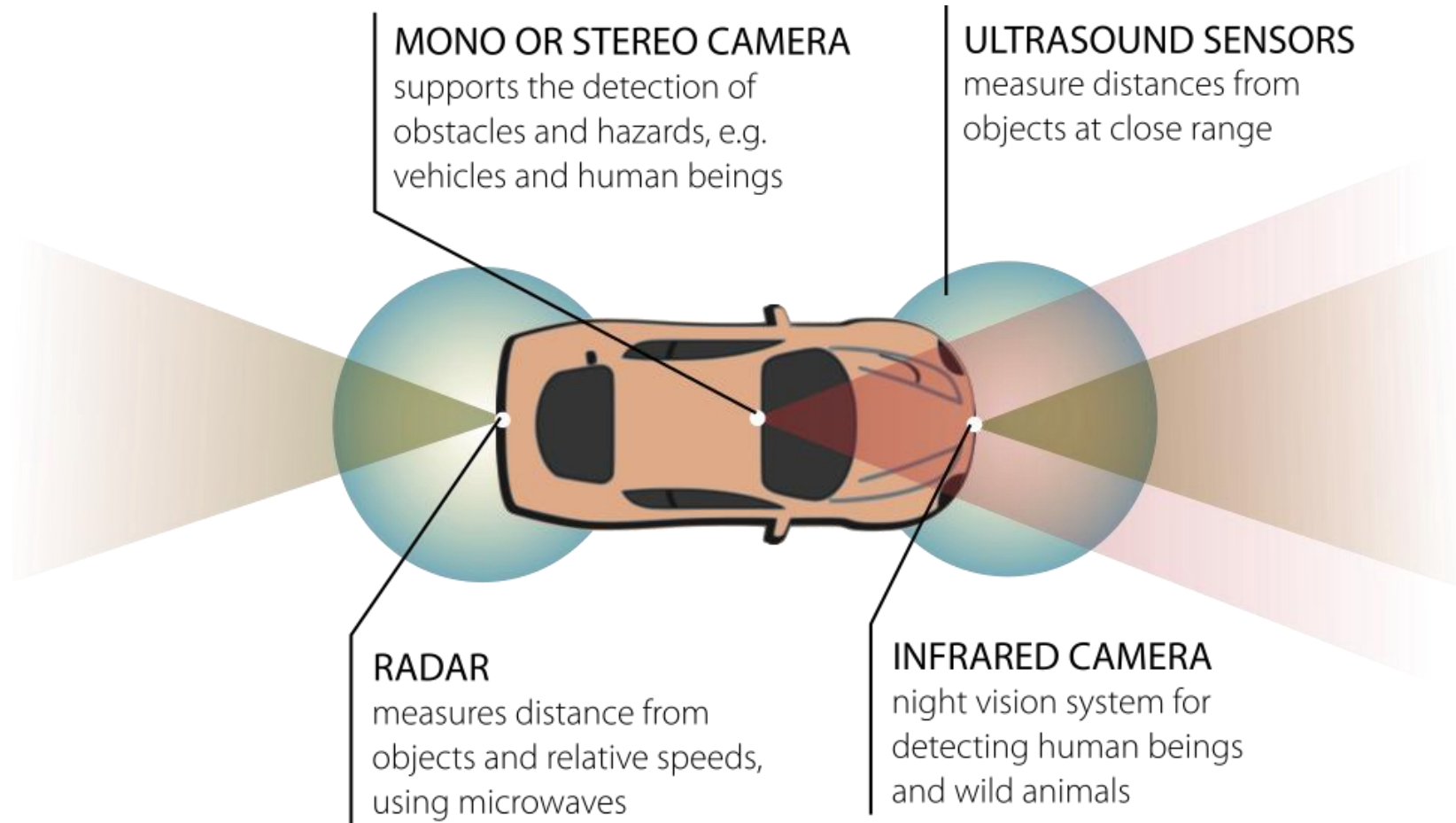
14 October 2016



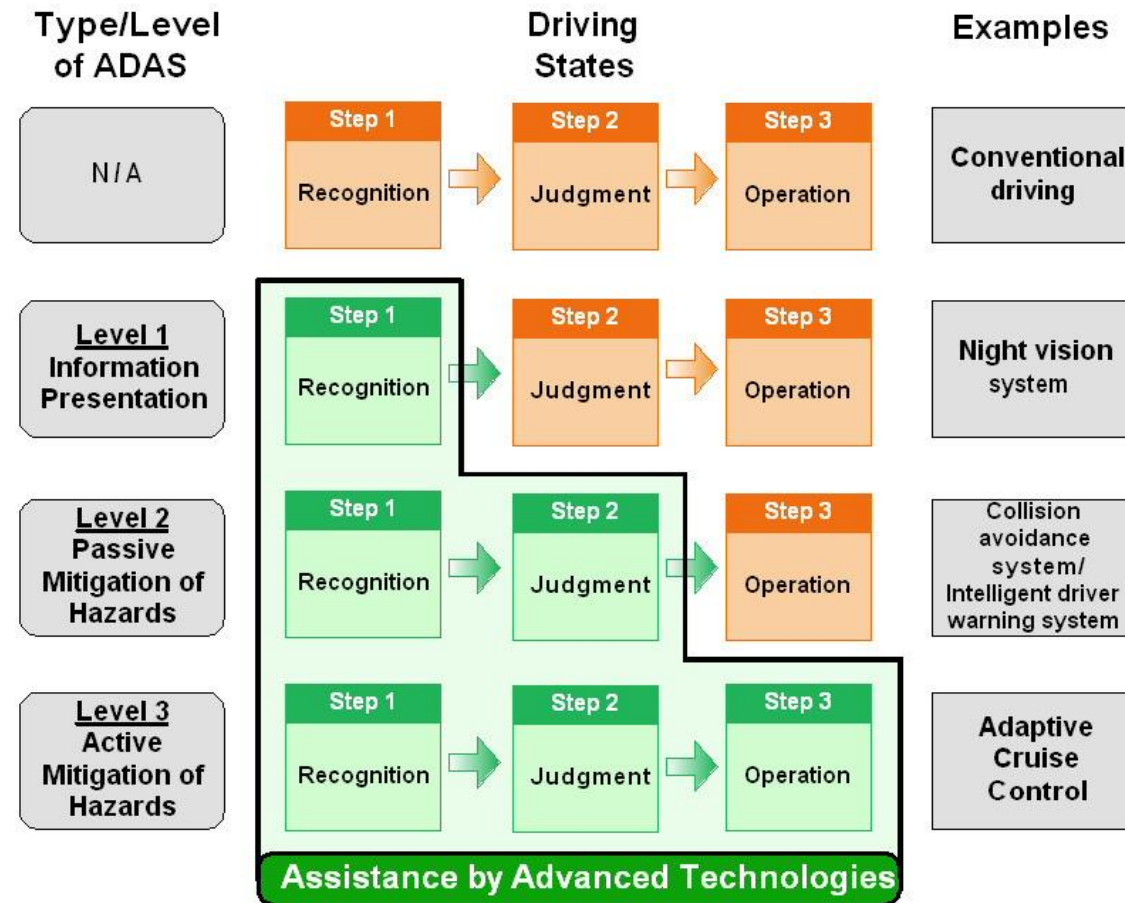
Advanced Driver Assistance Systems

ADAS are systems to **help the driver** in the driving process, increasing car safety and more generally road safety.

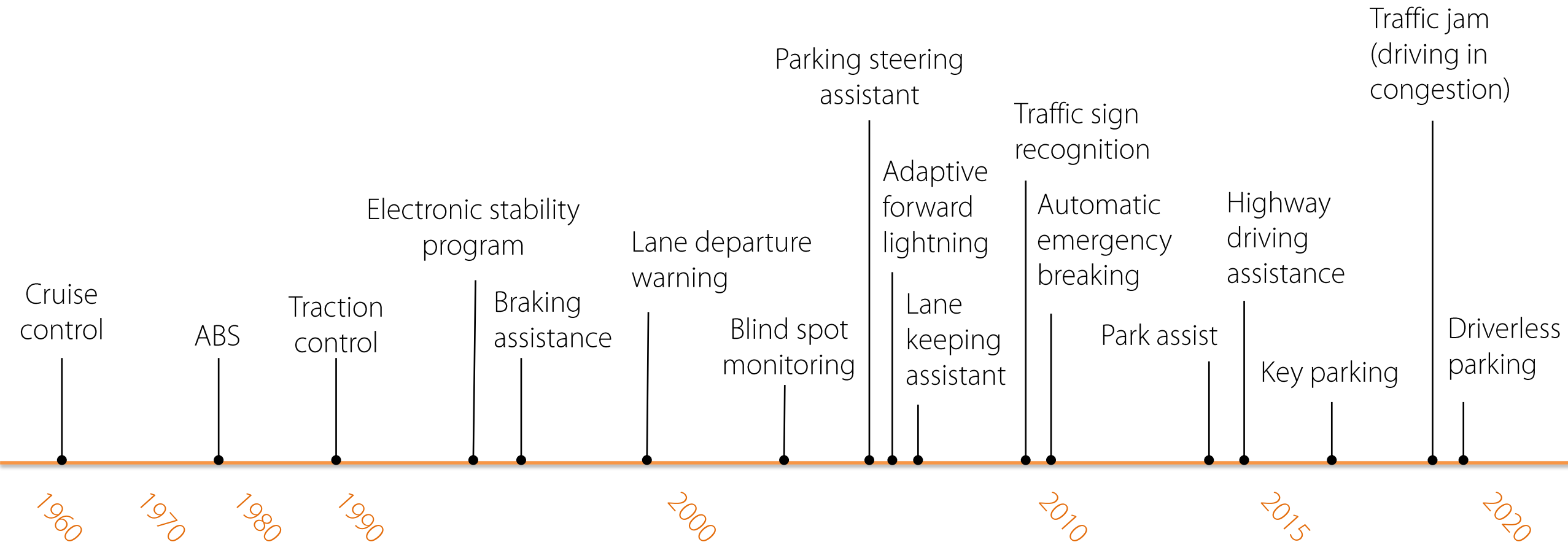
HOW ADAS WORKS?



TECHNOLOGICAL TENDENCY



EVOLUTION OF AUTOMATION



MOST DRIVERS
ARE **INDIFFERENT**
TO SAFETY



70%

do this

31%

do this
daily



90%
OF ROAD ACCIDENTS
CAUSED BY
HUMAN ERROR



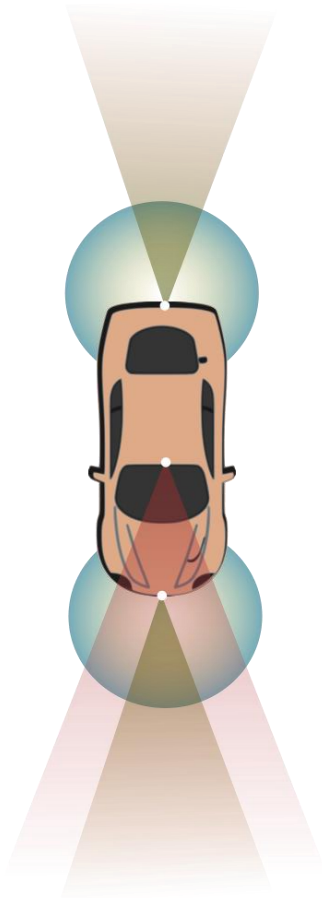


1 in 5

accidents
are due to

**DROWSINESS
&
FATIGUE**

SAFER VEHICLE



UNSAFER DRIVER



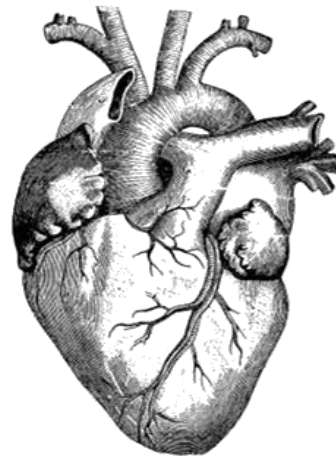
SAFER DRIVER ?



WE NEED TO FIND
TECHNOLOGIES THAT
REDUCE ACCIDENTS
TODAY

HEART SIGNAL

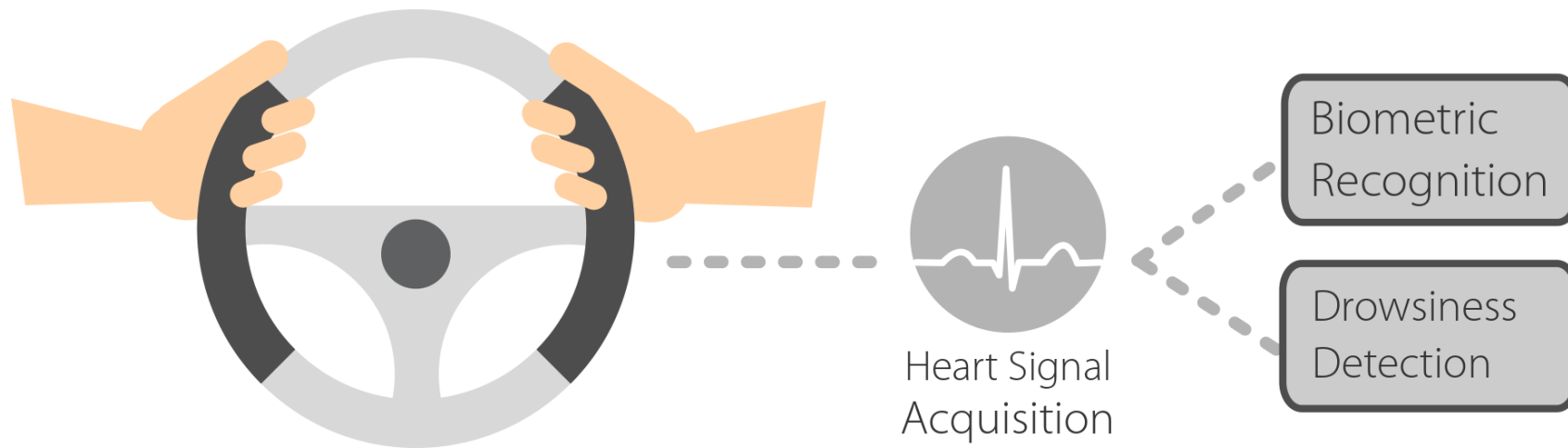
HAS THE POTENTIAL TO
SOLVE THIS PROBLEM



IDENTITY

FATIGUE

HEALTH



COMPANY



- Real-time Alerts
- Driver identity Recognition
- Route/Shift Optimization

DRIVER



- Real-time Alerts

FROM CONCEPT



CEIIA



BOSCH



TO PILOT



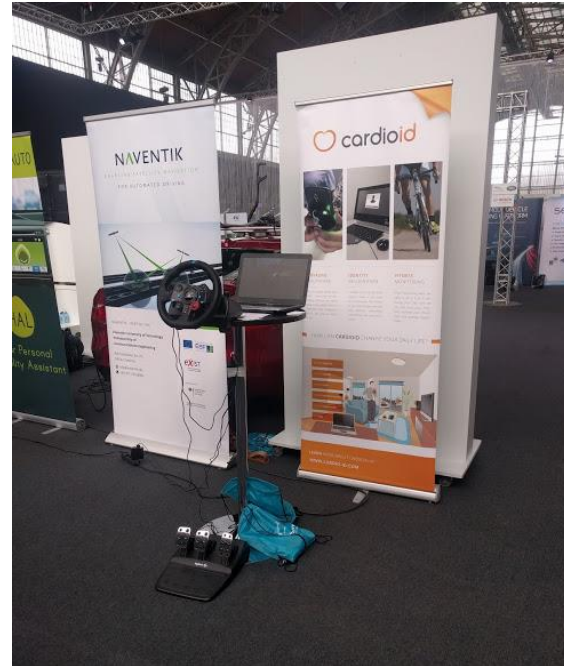
Rede expressos



> 60000 km

> 10 different drivers

> 2M heartbeats



Industrial Property

“Device and Method for Biometric Recognition Based on Electrocardiographic Signals”
WO2013109154A1



- PATENT **GRANTED** IN PORTUGAL
REGISTRATION 106102
- **PENDING** IN EUROPE, USA,
JAPAN, BRAZIL AND SOUTH
KOREA
PRIORITY DATE 19/01/2012

CardioID Technologies

- Based in Portugal
- Spin-off of Instituto Superior Técnico, University of Lisbon, Portugal
- Founded in 2014
- Funded by founder's capital and FIWARE/Soul-Fi Accelerator





Website:

www.cardio-id.com

Headquarters:

CEIIA , Centro para a Excelência e Inovação na Indústria Automóvel
Avenida D. Afonso Henriques, 1825
4450-017 Matosinhos

Lisbon Office:

Labs Lisboa | Incubadora de Inovação
R. Adriano Correia de Oliveira, 4A
1600-312 Lisboa

Contacts:

André Lourenço, email – arl@cardio-id.com – mobile: +351965488225
Roberto de Souza, email – rds@cardio-id.com – mobile: +351967357715

