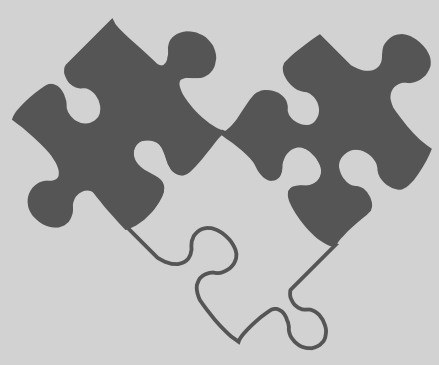
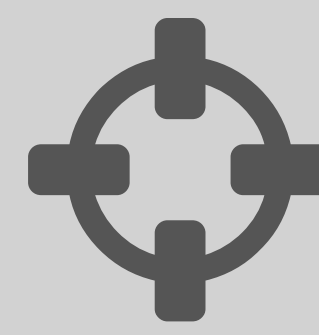


# PilotSense: a platform to design, evaluate and provide future onboard services

## BACKGROUND



The purpose of this feasibility study is to define and develop the initial architecture, framework and embodiment of PilotSense-DriverSense, a novel platform designed for enabling information exchange between the human pilots/drivers/passengers of a semi or fully autonomous airplane/vehicle and the Machine Intelligence unit onboard. The project is a collaboration of the Universidade Federal de Minas Gerais (Brazil), Kungliga Tekniska Högskolan (Sweden), and Ericsson (Sweden), Financed by the Fundação de Amparo a Pesquisa do Estado de Minas Gerais (Brazil).



## GOALS

Support further research efforts into

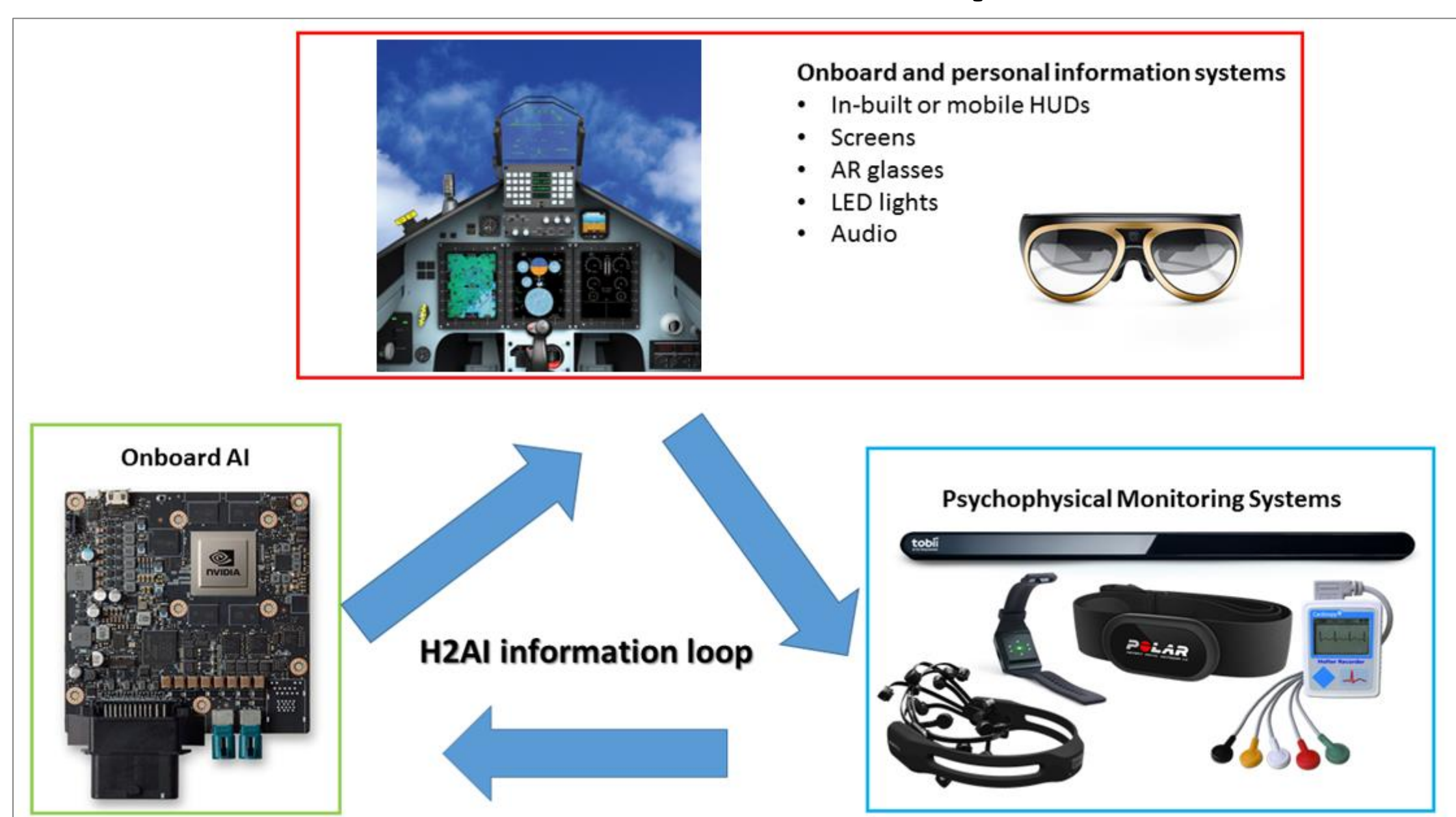
- how pilots/drivers/passengers respond to different traffic situations perceived directly and indirectly with the aid of information generated by onboard vehicle computation systems
- how a machine intelligence unit could adapt the information flow or airplane/vehicle actuations in order to increase human comfort.

## APPROACH



A set of experimental investigations will be performed through the development of an advanced system prototype. This will be composed by a set of main sub-system components, including a simulator, a data acquisition and processing system (contact and contact-less) and an AI module, each falling into the existing expertise of the different research partners.

### The three types of onboard sub-systems and the Human to Machine Intelligence information loop



### The architecture of the testbed and the main building blocks

