CREATIVE LAB

PRESENTATION 0f 5th EDITION

SEAT

UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

Escola Superior d'Enginyeries Industrial, Aeroespacial i Audiovisual de Terrassa

CREATIVE LAB

5th EDITION

MULTIDISCIPLINARY APPROACH
4 TOPICS AND ADVICE PROVIDED BY VW AND SEAT
FULLY DEVELOPED IN ENGLISH
UNDER CARNET CONSORTIUM

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4 TEAMS OF 5/6 PEOPLE FROM DIFFERENT DEGREES AND MASTERS
APPLICATION NEEDED TO BE SELECTED

CreativeLAB Application

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SCHEDULE: OCTOBER 18 MARCH 19
SEMINARS (APPROX 4)
4 MEETINGS (VW & SEAT): 10THOCT
STAND ALONE WORKING SESSIONS

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Work session with advisors

10th October 2018

28th November 2018

20th February 2019

10th April 2019

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DELIVERABLES

- DOCUMENTATION
- MULTIMEDIA
- PROTOTYPES

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Final presentation at SEAT premises. April 2018.

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TOPIC 1 & 2.- New Interaction Concepts in Virtual Reality

Contents:

-Experimental platform to test new interaction and new mobility solutions before actual implementation

-Interaction concept development

Interaction with simple buttons. How to operate without haptic feedback?

-Implementation of basic proof of concept (prototype)

Tools: VR glasses, Unity programming

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Campus d'Excel·lència Internacional

Creative Lab Project description

Sport driving style in the future

TOPIC 3.- SEAT

Concept description

- Motivation:
  - In the future, cars will be autonomous
  - Many customers will want to continue enjoying a sport driving style
  - How could be the **sport driving experience of the next CUPRA?**
- Goals:
  - Transformation of the sport driving experience into a **challenge of strategy**
  - The **Predictive Sport Drive (PreSdrive**) is an intelligent predictive system. It gives information about the surroundings and other vehicles to the pilot (to predict the future)
  - With this informations, the **pilot** is able to make decisions within established rules
  - **PreSdrive allows**, or not, the pilot's movement
  - **If the pilot does it correctly**, he will arrive earlier than if he wouldn't use the predictive system.
  - If you make a bad decision, you are penalized



Academic project approach

- Definition of **rules of visionary driving** (autonomous vehicle, no accident, driving rules on the road, driving rules on the vehicle, …)
- Design of **SW** for the PreSdrive
- Design of **HMI** for the PreSdrive
- Creation of a route simulation

TOPIC 4.- SEAT

CARNET
Cooperative Automotive Research Network

VOLKSWAGEN
AKTIENGESELLSCHAFT

Starting

Creative Lab: Robots + citizens (1/3)

Motivation and Goals

- **Motivation:**
  - Auge de marcas que desarrollan **vehículos y pruebas piloto** con vehículos autónomos
  - **Auge de robots y asistentes** que ofrecen múltiples servicios
  - **Reticencia / rechazo** a los **vehículos autónomos** (miedo en relación a la seguridad y a perder el control, …) y a **comunicarse con máquinas** (no me entiende, …)
- **Goal:**
  - Definir el **sistema de comunicación** (tipos de lenguaje, modos de comunicación,…) entre los **vehículos autónomos y los ciudadanos**, con el propósito de **humanizar** los procesos tecnológicos

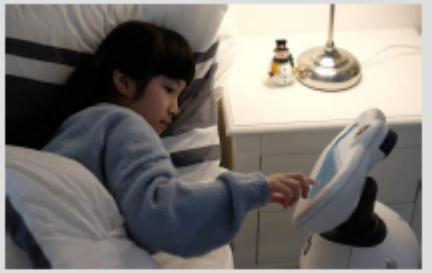
Concept

- **Proceso de design thinking** con el objetivo de presentar **dos propuestas:**
  - **Sistema de comunicación** para vehículo autónomo de **paquetería**
  - **Sistema de comunicación** para vehículo autónomo **dinamizador de la ciudad**
- **Entregables**
  - Investigación "estado del arte": benchmark + tendencias
  - Entrevistas
  - Definición de los usuarios
  - Journey de los dos servicios y touchpoints con ciudadanos
  - Ideación & selección: qué, por qué, para quién, cómo, cuándo
  - Desarrollo interface comunicación & arquitectura de la información
  - Video, prototipo, presentación y memoria

Exploration | Feasibility | Transfer



Coche autónomo de Uber



Robelf diseña el robot guardián del hogar

CarNet Research Field:
Urban Mobility Concepts

Project Manager:
A. Kleen (K-EFF), E. Lopez (SEAT)

Partner:
SEAT, K-EFF, UPC ESEIAAT

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ACADEMIC RECOGNITION

SUBJECT IN 2ND SEMESTER

TFG/TFM AVAILABLE

GRANTS AT VW GERMANY AVAILABE

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