UP-Drive

Automated Urban Parking and Driving

Research and Innovation Action - Horizon 2020
H2020-ICT-24-2015: Robotics
Grant Agreement Number 688652

Project start date: January 1, 2016, Duration: 48 months

Deliverable D9.2

Brochure, newsletter

Coordinating partner: Volkswagen A.G., Group Research
Coordinating person: Wojciech Derendarz

Lead contractor for this deliverable: ČVUT
Deliverable editor: Václav Hlaváč

Due date of deliverable: June 30, 2016
Date of preparation: December 19, 2016
Revision: 1.0

Dissemination level: Public

The assignment was given in the *UP-Drive* Description of action at page 37 as "A nicely laid out brochure at M6 to inform the public about the project and its main objectives and content. A knowledge management report will be provided to keep internal and external experts informed about new knowledge or patents created in the project."

Brochure

The two page brochure content was prepared by Júlia Škovierová and Václav Hlaváč from ČVUT team. The content was reviewed by the *UP-Drive* project coordinator Wojciech Derendarz in mid-September 2016. The graphical design was performed by a contracted designer Jaromír Páv. The final brochure was approved by Wojciech Derendarz at the end of September 2016.

One thousand copies of the brochures were printed in mid-October 2016. Two hundreds copies were distributed to the head of each *UP-Drive* partner team by snail mail at mid-October. It was confirmed that all the parcels with brochures reached their respective destination.

Project Information

UP-Drive
Automated Urban Parking and Driving

Time span & website

January 1, 2016 - December 31, 2019
http://up-drive.eu

Coordinator

Wojciech Derendarz
Volkswagen Group Research
Driver Assistance and Integrated Safety
Letterbox 1777
38436 Wolfsburg, Germany
Phone: +49-5361-9-15662
wojciech.derendarz@volkswagen.de

Funding

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement No 688652

Consortium

- **Volkswagen AG**
  Vehicle infrastructure, environment perception, decision making and trajectory planning
- **Swiss Federal Institute of Technology in Zurich – Autonomous Systems Lab**
  Lifelong localization & mapping
- **IBM Research GmbH**
  Cloud infrastructure, semantic data aggregation
- **Technical University of Cluj-Napoca**
  Environment perception and scene understanding
- **Czech Technical University in Prague**
  Environment perception and scene understanding

Automated Urban Parking and Driving

enjoy the ride,
leave the rest to us...

An H2020 European Project

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION
HORIZON 2020

VOLKSWAGEN AKTIENGESELLSCHAFT
ETH Zürich Autonomous Systems Lab
IBM
TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA
CTU CZECH TECHNICAL UNIVERSITY IN PRAGUE

VOLKSWAGEN AKTIENGESELLSCHAFT
ETH Zürich Autonomous Systems Lab
IBM
TECHNICAL UNIVERSITY OF CLUJ-NAPOCA ROMANIA
CTU CZECH TECHNICAL UNIVERSITY IN PRAGUE

Motivation

Global trend towards urbanization calls for new mobility concepts.

The UP-Drive consortium is convinced that automated driving technology is the key component enabling

- more comfort and safety,
- reduction of congestion and
- more efficient use of resources

Yet, today's automated driving technology is not mature enough to handle the complexity of urban traffic.

Goals

The main goal of UP-Drive is therefore to push forward the perception, localization and reasoning abilities of autonomous vehicles.

In the course of the project, we will build a prototype car systems capable of driverless operation in complex urban environments.

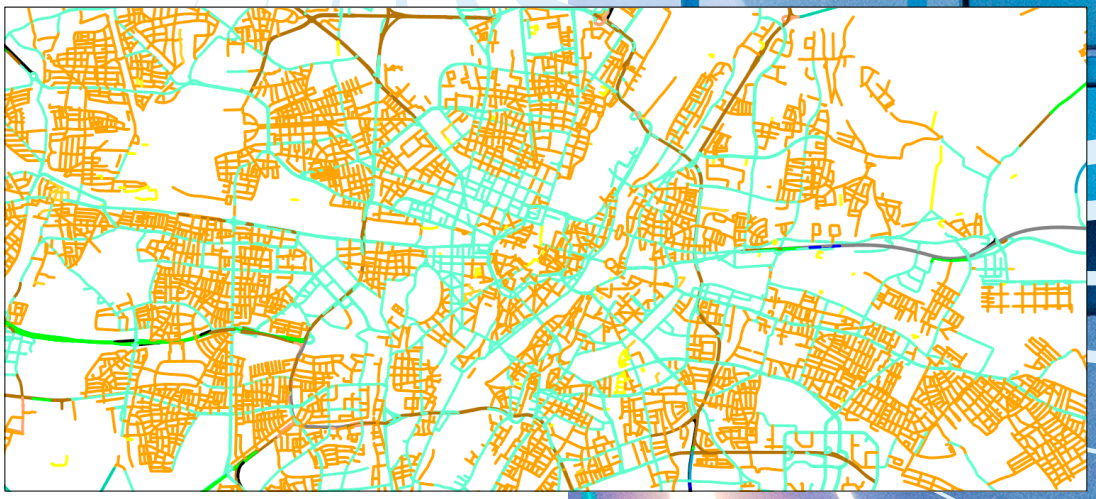
Our focus will be placed on residential areas and speeds up to 30 km/h.

Scientific contributions

We are especially interested in advancing the following technologies:

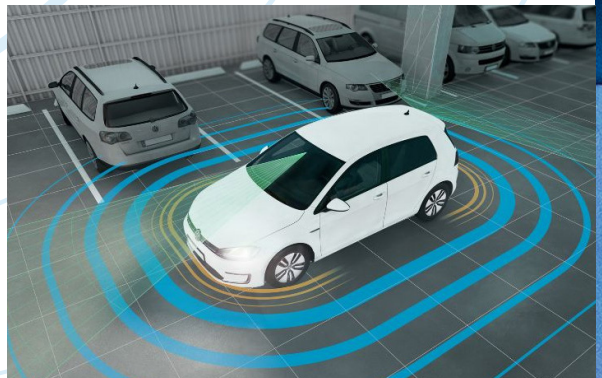
- Robust, general 360° object detection and tracking employing low-level spatio-temporal association, tracking and fusion mechanisms.
- Accurate metric localization and distributed geometrically consistent mapping in large-scale urban environments.
- Scene understanding, starting from the detection of semantic features, classification of objects, towards behavior analysis and intent prediction.

UP-Drive cars will feel at home in 30 km/h zones. Here the map of Munich with 30 km/h zones marked orange.



The fully electric VW e-Golf equipped with numerous sensors serves as the first test vehicle.

Making cars sense and understand their surroundings is one of the key challenges in UP-Drive.



Newsletter

The Newsletter is dedicated to presentation information about the *UP-Drive* project. The Newsletter is located on fully functional project page (*http : //up−drive.eu/category/resources/*). In this page, the short description about each publication relevant to the *UP-Drive* project and published by *UP-Drive* team members will be presented. The example of such publication presentation is shown in Figure 1, where each information contain brief description of the publication as well as citation in BibTeX form.

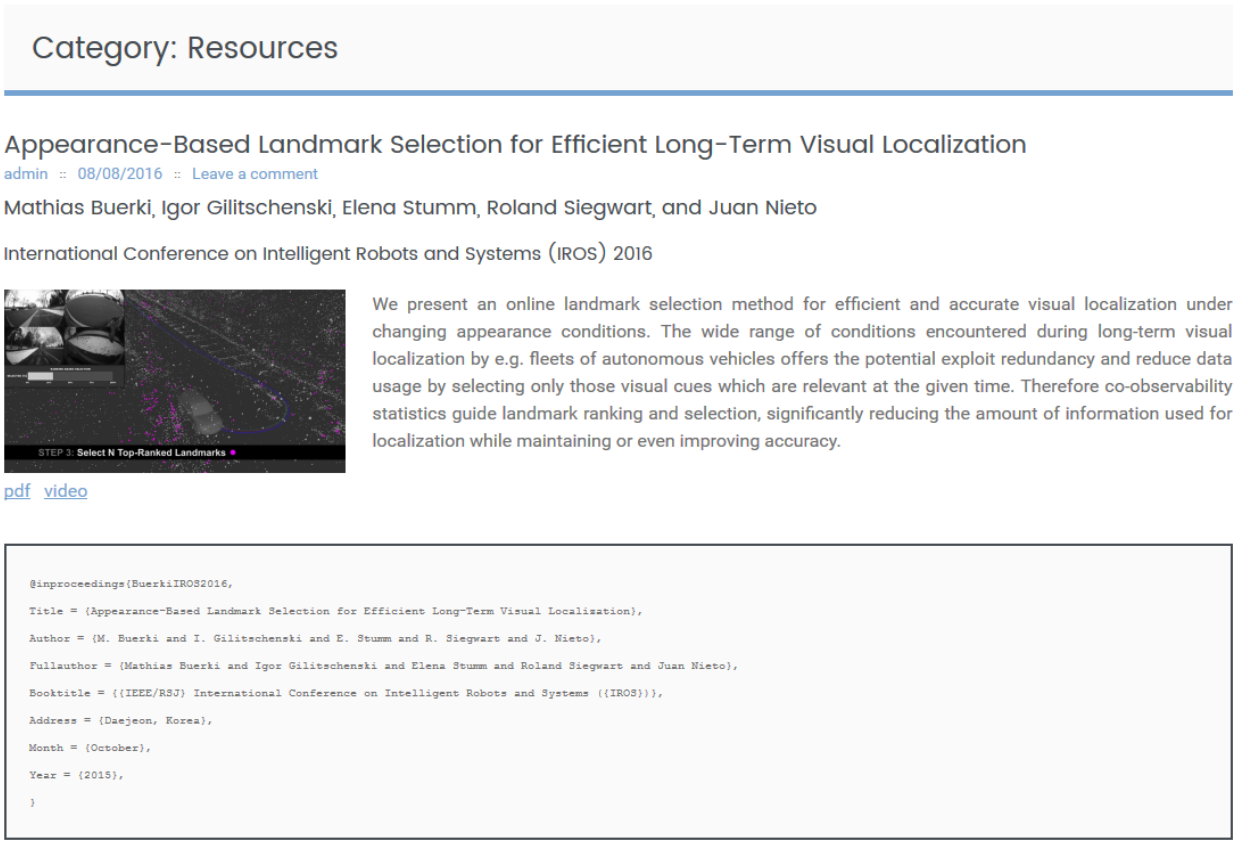


Figure 1: Example of the Newsletter