

ERAdiate





University of Zilina

- The ERAdiate Project
- Enhancing Research and innovAtion dimension of the University of Zilina in intelligent transport systems

Presentation was prepared by ERAdiate team members and coordinators for WIRE conference Kosice

 EU: One of the first ERA Chairs & first widening measure funded in SK





UNIVERSITY OF ŽILINA ...university with tradition



ERAChair-ERAdiate pillars at UNIZA

Historical background of the University of Žilina

Research infrastructure

Intelligent transport systems

Human resources

Dominant area in H2020



ERAdiate – Focus on ITS

- Cooperative and complex systems
- SMART solutions for transport
- Decarbonisation of mobility (eMobility)
- Business models for ITS and ICT
- Inclusive mobility
- Societal effects of ITS deployment



ERAdiate Vision

"ERAdiate is developing significant ITS topics with an international recognized footprint"



How to unlock UNIZA potential in ITS?

Keywords

vision

specialization

transformation

strategy

synergies

action plan

interaction

Several actions & expected impacts!

Research & Innovation

Institutional & Structural Changes

Regional Development



Examples of success stories







SIMMARC

SIMMARC – Safety IMprovement using near Miss Analysis on Road Crossings

- Duration: 3 years (2016-2018), kick off meeting on 12 January 2017
- Financed by Austrian Research Promotion Agency (FFG)
- Leader: Joanneum Research Graz, Austria
- Partnership: SIEMENS PLANUM University of Zilina Institute of forensic engineering



Conference report from "ITS: a tool or a toy,"



Report is based on the Working Group discussions at the Conference "ITS: a tool or a toy" held in Žilina on November 22-23, 2016.

Publication presents the key elements and main conclusions from the two parallel Working Groups on Autonomous Driving and MaaS.

The report first highlights the main challenges for **AutDriving** and **MaaS** and illustrates the possible routes to address these challenges, and finally it presents specific recommendations to key stakeholders.



Industry 4.0, Robotics and Autonomous Vehicles: highlights from the NuMe Workshop

The University of Udine (Italy) is at the forefront of interdisciplinary research on robotics and autonomous technologies, particularly thanks to the activities organised by the Research Laboratory for New Media (NuMe) led by Prof. Leopoldina Fortunati.

On 3 April 2017, the NuMe laboratory organised the workshop "Smart robots and Industry4.0 – Concerns and perspectives between law and computer science". ERAdiate team member was invited to contribute by giving a talk on "self-driving cars as social robots".



UNIZA takes part in SENSIBLE



UNIZA, together with ERAdiate, takes part in a new H2020 funded project on the integration of physical sensing to data processing in the context of smart sensing. The kick-off meeting of the SENSors and Intelligence in BuiLt Environment (SENSIBLE) project and the first SENSIBLE Workshop on Smart Buildings and Smart Transport were hosted by UNIZA on 4-5 April 2017.



Exploring the value of travel time project MoTiV

The University of Žilina (UNIZA) has been **granted funding for a European project "Mobility and Time Value" (MoTiV)** in the framework of the Horizon 2020 programme. The project proposal was submitted by ERAdiate.

- 7 Partners from 6 EU Countries
- Mix of university (1), research organisations (2), consultancy and mobility companies (3) and end-user association (1)

The MoTiV project, coordinated by UNIZA, will be funded under the "Research and Innovation" scheme for 30 months.

The main goal of the project is to advance research in the emerging area of Value of Travel Time (VTT).





INTSYS 2017

The international conference INTSYS 2017 – "Intelligent Transport Systems – From research and development to the market uptake" will be held on **28-29 November 2017 in Helsinki, Finland** as a collocated scientific event of the Smart City 360" summit organised with https://eai.eu/ and https://create-net.fbk.eu/

The conference is focused on Intelligent Transport Systems and their application in all modes of transport – road, railway, air and waterborne.

Researchers are invited to submit a full paper by 31 July 2017.



UNIZA Grants Week

ERAdiate finalised the programme of the UNIZA Grants Week to be held on 19-21 September 2017.

The programme:

- Dr Seán McCarthy, expert in Research funding in Horizon 2020, who will deliver two training courses on "how to write a competitive H2020 proposal" and "Impact of H2020 projects".
- Two interactive sessions:
 - "Hands-On training to enhance researchers' skills" conducted by experts from Europa Media, Ömer Ceylan and Valentina Zuri.
- Speakers from ERAdiate, UNIZA, other Slovak institutions, companies and the Slovak Centre of Scientific and Technical Information will not only exchange on funding opportunities, general aspects and skills important for project design and management, but also share good practice and experience in personal and collaborative fund raising.

The Grants Week will also provide a **network platform for researchers and regional companies** to facilitate collaborations.



EC launches an award for young transport innovators

110 innovative solutions for decarbonising EU transport were submitted for the

European Transport Innovation Challenge 2017

Commission Recognises Twelve Projects for keeping Europe moving sustainably

Tibor Petrov, PhD student at UNIZA, has entered the Challenge and has been selected as one of the 12 award winners.







Newest successful project (decision of COST CSO on 23th of June)

- COST action proposal "Wider Impacts and Scenario Evaluation of Autonomous and Connected Transport" (WISE-ACT) was submitted to the COST Open Call 2016-2.
- at least six participants from our ITS conference are part of the Network of Proposers:
- Johannes Liebermann (Austria)
- Cristina Pronello (France)
- Ivana Dusparic (Ireland)
- Federico Costantini (Italy)
- Floridea di Ciommo (Spain)
- Jorge Alfonso Kurano (Spain)
- Memorandum of Understanding is in preparation



More about activities of the ERAChair – ERAdiate project is on:

ERAdiate web page

http://www.erachair.uniza.sk/

ERAdiate Presentations

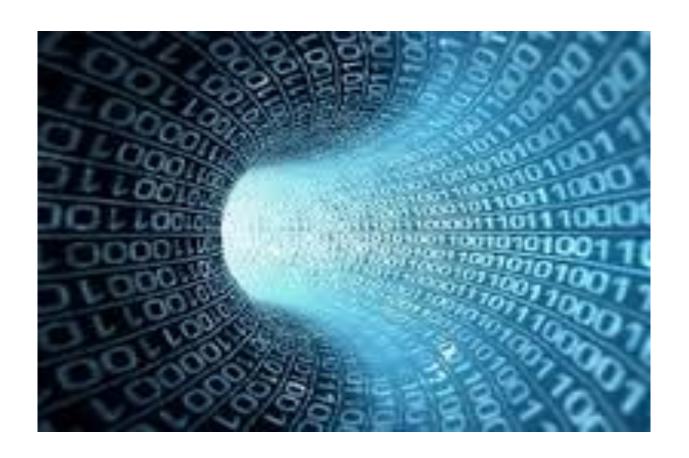
www.erachair.uniza.sk/activities/conferencespresentations/

ERAdiate Publications

www.erachair.uniza.sk/activities/publications



Cross-Cutting Challenges/Obstacles of the ERADiate project





Cross-Cutting Challenges/Obstacles of the ERADiate project

- Difficulty to establish synergies and collaborative efforts because of a culture of competition, even within university (among USP, faculties and departments working on overlapping/compatible topics)
- Low interdisciplinarity in teams (e.g. departments do not usually jointly prepare project proposals – few good examples)
- Need to enhance internationalization (e.g. procedures, forms and web-sites content are not in English enough; often administration does not speak English; no practical information guides on Slovak system e.g. taxation, health-care, insurance, university system)



Cross-Cutting Challenges/Obstacles of ERADiate project

- Still remain problems with research support in Slovakia
- Decreasing number of students & researchers.
 Salaries and conditions in private sector more attractive (especially to young people). UNIZA strategy should consider how to solve this trend, for instance investing in internationalization and attracting foreign researchers not only from "western countries"
- High administrative burden
- Conservativism of Uni environment needs to be change in some areas in general - not only at UNIZA



ERAdiate sustainability

- It is one of most important challenges at the present time
- ERAdiate core staff has time-limited contracts ending together with the project approximately in two years
- New competitive projects will thus last longer than the ERAdiate funding period
- Question is "Who will finish the projects?"
- No one can guarantee to partners that there will be staff available to finish the projects in a professional way
- It is likely that staff leaves rather early if there is no personal professional perspective



onclusions

- ERAChair project is highly important catalyst and driver to enhance visibility and recognition of UNIZA in ERA, Regional development, RIS3 strategy, Standardisation in ITS ect.
- We trust in significant influence of ERAChair in research, innovation and education at the UNIZA
- Lot of work is still in front of the ERAChair team as such
- It is a great responsibility for all of us



CAMPUS OF THE UNIVERSITY

















ERAdiate team is located at the University Science Park of the University of Zilina



