



# University of Ljubljana


Name of the organisation :	University of Ljubljana	<i>University of Ljubljana</i> 
Address:	Kongresni trg 12 1000 Ljubljana Slovenia	
Tel:	+386 1 241 85 00	
Fax:	+386 1 241 86 60	
Web site:	<a href="http://www.uni-lj.si/eng/">www.uni-lj.si/eng/</a>	

Name of the contact person :	prof. dr. Gregor Majdič	<i>Picture of the contact person</i>
Function:	Rector	
Address:	c/o University of Ljubljana	
Tel:	+386 1 241 85 00	
Fax:	+386 1 241 86 60	
E-mail:	<a href="mailto:rektorat@uni-lj.si">rektorat@uni-lj.si</a>	

Name of the contact person :	prof. dr. Andrej Košir	
Function:	Professor	
Address:	c/o University of Ljubljana	
Tel:	+386 1 476 83 54	
Fax:	+386 1 476 88 55	
E-mail:	<a href="mailto:andrej.kosir@fe.uni-lj.si">andrej.kosir@fe.uni-lj.si</a>	

Name of the contact person :	dr. Gregor Strle	
Function:	Researcher	
Address:	c/o University of Ljubljana	
Tel:	+386 1 476 85 57	
Fax:	+386 1 476 88 55	
E-mail:	<a href="mailto:gregor.strle@fe.uni-lj.si">gregor.strle@fe.uni-lj.si</a>	

Name of the contact person :	prof. dr. Urban Burnik	
Function:	Assistant professor	
Address:	c/o University of Ljubljana	
Tel:	+386 1 476 88 44	
Fax:	+386 1 476 88 55	
E-mail:	urban.burnik@fe.uni-lj.si	

Name of the contact person :	as. dr. Janez Zaletelj	
Function:	Researcher	
Address:	c/o University of Ljubljana	
Tel:	+386 1 476 82 71	
Fax:	+386 1 476 88 55	
E-mail:	janez.zaletelj@fe.uni-lj.si	

**Type of organisation:**

SME     School     University     Public Authority   
 Training     No Profit     NGO

Other (Specify)

**Fields of action :**

SMEs     Youth     Universities     Public Authorities   
 Equal opportunities     Schools     Unemployed

Other (Specify)

## Description of the organisation

**University of Ljubljana (Univerza v Ljubljani, UL)** is the oldest, largest, and internationally best-ranked university in Slovenia, being among the top 500 universities according to the Academic Ranking of World Universities Shanghai ranking (ARWU). The university was founded in 1919 and encompasses 23 faculties, 3 art academies, and 3 associated members.

**STUDY** – In terms of the number of students, UL ranks **among the largest HEI in Europe** with more than 40.000 students. In terms of the number of employees, UL ranks as medium-sized HEI and employs approximately 6.000 employees, with more than 3.500 academic staff. Study programmes at UL cover all ISCED areas in the first and second cycle study programmes and leads the way in some new developments in technology and research (cognitive science, nanotechnologies, environmental sciences, biomedicine, etc.).

**HR EXCELLENCE** - From 2008 UL is committed to respecting the principles of the European Charter for Researchers and the Code of Conduct for Recruitment of Researchers, which led to the award of the **“HR Excellence in Research” in 2013**.

**RESEARCH ACTIVITY** - UL is very active in national and international R&D and educational programmes, and creates almost **half of the research results of Slovenia**. In 2020 UL researchers worked in 274 research groups on 167 national research programmes, 416 national research projects with more than 4.300 registered researchers.

**INTERNATIONAL RESEARCH** - UL is also very active in international research and education programmes. In the programming period 2007-2013, the UL altogether cooperated in 745 European projects, including 163 FP7 projects, which ranked UL in the first place in the EU-13 countries among the research organisations (source MIRRIS report). In 2020, UL was involved in 621 European projects. Up to now, the UL has been involved in 201 HORIZON2020 projects (including 4 ERC grants, 2 ERA-CHAIR, 1 Twinning project and 33 Marie Skłodowska-Curie Actions), 208 ERASMUS+ KA2, K3, Jean Monnet and Sport projects and 112 projects of the European territorial cooperation programme.

**TTO** - To protect the university intellectual property developed through the public financed research projects and to improve the technology transfer from the university to the industry, a central university Technology Transfer Office was established in 2007. University develops and **accelerates the research** also through the University Committee for R&D, and Committee for Innovation, which consists of representatives of most propulsive Faculties. University Incubator and Institute for Innovation and Development and the Slovenian Innovation Hub are three other units in which the University of Ljubljana supports innovation and development in different ways along with laboratories and other research units within Faculties.

Membership in EUTOPIA, the Guild, CELSA, LERU-CE7, UNICA, Utrecht Network, European University Association (EUA), CEEPUS, Central European Exchange Program, CEI University network, SAR Scholars at Risk and Rector's Conference Alpe Jadran.

## Experience of the organization in previous European projects

UL's current and past projects are focused on the following topics:

Start	End	Program	Acronim	Title
2014	2016	HORIZON2020	EVIDENT	Ebola Virus Disease - correlates of protection, determinants of outcome, and clinical management

2020	2023	HORIZON2020	A4L_ACTIONS (Alliance4Life_ACTIONS)	Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe
2019	2025	HORIZON2020	Instand-NGS4P	Integrated and standardized NGS workflows for Personalised therapy
2019	2025	HORIZON2020	RISCC	Risk based Screening for Cervical Cancer
2020	2021	HORIZON2020	SoNAR-Global	A Global Social Sciences Network for Infectious Threats and Antimicrobial Resistance
2016	2020	HORIZON2020	CrowdHEALTH	Collective wisdom driving public health policies
2016	2019	HORIZON2020	LIQUEFACT	Assessment and mitigation of liquefaction potential across Europe. A holistic approach to protect structures/infrastructures for improved resilience to earthquake-induced liquefaction disasters
2020	2023	HORIZON2020	BD4NRG	Big Data for Next Generation Energy
2019	2023	HORIZON2020	DigiFed	Digital Innovation Hubs (DIH) federation for large scale adoption of digital technologies by European SMEs
2020	2023	HORIZON2020	EUHubs4Data	European Federation of Data Driven Innovation Hubs
2020	2023	HORIZON2020	B1MG	Beyond 1M Genomes
2017	2021	HORIZON2020	HEART	Holistic Energy and Architectural Retrofit Toolkit
2016	2020	HORIZON2020	PRACE-5IP	PRACE 5th Implementation Phase Project
2019	2019	HORIZON2020	NEUS	NEUS

2020	2020	HORIZON2020		Remote therapy management in chronic heart failure patients
2020	2020	HORIZON2020	SI EIT-M	EIT Manufacturing Hub in Slovenia
2019	2022	HORIZON2020	RIS-RESTORE (Red Mud)	Evaluation of Red Mud Tailings in the ESEE region
2018	2020	HORIZON2020	SPL-CYCLE	Closing the loop of the Spent Pot-line (SPL) in Al smelting process
2018	2023	HORIZON2020	COMPETE	Chair of Micro Process Engineering and Technology
2020	2025	HORIZON2020	CONI	Chair of Neuroinformatics
2017	2022	HORIZON2020	EIRENE	Post-war transitions in gendered perspective: the case of the North-Eastern Adriatic region
2020	2025	HORIZON2020	FAIME	Flavour Anomalies with advanced particle Identification Methods
2020	2025	HORIZON2020	LOGOS	Light-operated logic circuits from photonic soft-matter
2016	2021	HORIZON2020	OMNES	Open many-body non-equilibrium systems
2017	2021	HORIZON2020	CABUM	An investigation of the mechanisms at the interaction between cavitation bubbles and contaminants
2018	2023	HORIZON2020	SUPERCOOL	Superelastic Porous Structures for Efficient Elastocaloric Cooling
2020	2021	HORIZON2020	Humanities Rock	Humans and Research
2018	2019	HORIZON2020	Humanities Rocks!	Humanities Rocks! Science on stage in Ljubljana for 100 years
2019	2021	HORIZON2020	WeCount	Citizens Observing Urban Transport
2018	2021	HORIZON2020	Ves4US	Extracellular vesicles from a natural source for tailored nanomaterials
2017	2021	HORIZON2020	DRIVEMODE	Integrated Modular Distributed Drivetrain for Electric/Hybrid Vehicles
2017	2020	HORIZON2020	OBELICS	Optimization of scalable realtime models and functional testing for e-drive concepts
2018	2020	HORIZON2020	VISION-Xev	Virtual component and system integration for efficient electrified vehicle development

2017	2021	HORIZON2020	CYBERLEGS Plus Plus	The Cybergenetic lower limb cognitive orthoprosthesis Plus Plus
2018	2021	HORIZON2020	DECENTER	Decentralised technologies for orchestrated cloud-to-edge intelligence
2019	2021	HORIZON2020	DigiPLACE	Digital Platform for Construction in Europe
2018	2022	HORIZON2020	EMBEDDIA	Cross-Lingual Embeddings for Less-Represented Languages in European News Media
2017	2019	HORIZON2020	EuConNeCts3	European Conferences on Networks and Communications
2020	2023	HORIZON2020	OntoChain	Trusted, traceable and transparent ontological knowledge on blockchain
2020	2022	HORIZON2020	EPmIC	Controlling the susceptibility of biological cells to pulsed electric field treatment by using ion channel modulators
2019	2021	HORIZON2020	LiquidEff	Algebraic Foundations for Liquid Effects
2019	2021	HORIZON2020	OPTOSOL	Interacting optical and topological solitons in frustrated cholesterics
2018	2020	HORIZON2020	TCDL	Topological Colloidal Double Layers
2020	2022	HORIZON2020	WeCanIt	We can do it! Women's labour market participation in the maritime sector in the Upper Adriatic after the two World Wars in an intersectional perspective
2020	2022	HORIZON2020	WiseWomen	Wise Women: Beliefs and Networks of Female Spiritual Figures in Central European Vernacular Religion
2019	2024	HORIZON2020	EATRIS-Plus	Consolidating the capacities of EATRIS-ERIC for Personalised Medicine
2019	2023	HORIZON2020	ELIXIR-CONVERGE	Connect and align ELIXIR Nodes to deliver sustainable FAIR life-science data management services
2020	2023	HORIZON2020	PerMedCoE	HPC Center of Excellence in Personalised Medicine
2018	2022	HORIZON2020	PRACE-6IP	PRACE 6th Implementation Phase Project
2019	2023	HORIZON2020	EVA-GLOBAL	European Virus Archive Global

2017	2021	HORIZON2020	TERRINet	The European Robotics Research Infrastructure Network
2019	2023	HORIZON2020	GreenTRIBOS	GreenTRIBOS (European Joint Doctorate in Green tribology for sustainable engineering)
2017	2021	HORIZON2020	PhD4GlycoDrug	Multidisciplinary European Joint Doctorate in the Design and Development of Glyco Drugs
2020	2024	HORIZON2020	ASTRA	Applying Sustainability Transition Research in Social Work tackling Major Societal Challenge of Social Inclusion
2020	2024	HORIZON2020	MOQS	Molecular Quantum Simulations
2020	2024	HORIZON2020	PARENT	Premature newborn motor and cognitive impairments: Early diagnosis
2020	2023	HORIZON2020	POLYSTORAGE	European training network in innovative polymers for next-generation electrochemical energy storage
2020	2025	HORIZON2020	RAPTOR	Real-time Adaptive Particle Therapy of Cancer
2016	2020	HORIZON2020	SOLAR-TRAIN	Photovoltaic module life time forecast and evaluation
2019	2023	HORIZON2020	THREAD	Joint Training on Numerical Modelling of Highly Flexible Structures for Industrial Applications
2019	2023	HORIZON2020	TranSys	Translational Systemics: Personalised Medicine at the Interface of Translational Research and Systems Medicine
2016	2020	HORIZON2020	TREATMENT	Training European Network: Metabolic Dysfunctions associated with Pharmacological Treatment of Schizophrenia
2016	2020	HORIZON2020	XP-RESILIENCE	Extreme loading analysis of petrochemical plants and design of metamaterial-based shields for enhanced resilience
2018	2019	HORIZON2020	Alliance4Life	Life Science Alliance: Closing Research and Innovation Divide in the EU
2017	2020	HORIZON2020	ME-WE	Psychosocial Support for Promoting Mental Health and Well-being among Adolescent Young Carers in Europe
2018	2021	HORIZON2020	SILICOFCM	In Silico trials for drug tracing the effects of sarcomeric protein mutations leading to familial cardiomyopathy
2016	2022	HORIZON2020	CID	Computing with Infinite data

2017	2021	HORIZON2020	GETM3	Global Entrepreneurial Talent Management 3
2018	2022	HORIZON2020	RISEWISE	Women with disabilities in social engagement
2020	2025	HORIZON2020	TRENDO	Translational Research on Endometriosis
2018	2022	HORIZON2020	GEARING ROLES	Gender Equality Actions in Research Institutions to traNsform Gender ROLES
2018	2022	HORIZON2020	COGOV	Co Production and Co Governance: Strategic Management, Public Value and Co Creation in the Renewal of Public Agencies across Europe
2018	2021	HORIZON2020	RePAST	Strengthening European integration through the analysis of conflict discourses: revisiting the past, anticipating the future
2017	2018	HORIZON2020	SLICE3D	Slovenian Centre of Excellence on 3D geodata
2019	2021	HORIZON2020	COGDEC	Quantifying ageing related cognitive decline and mild cognitive impairment

### **Experience and Expertise of the organization in the project's subject area**

UL has relevant experience in that are related with the project field of action. In particular, the research in automatic student attention recognition focused on measuring, modelling and evaluation of automatic student attention recognition in terms of their performance. Next is the research on motivation of the learner using positive reinforcement law through emotion communication. Also, the project on multimedia exposure measurement focused on the development of a novel instrument for short term multimedia exposure and the application of psycho-physiological signals in the estimation of multimedia exposure. Several researches and projects are focused on the design and evaluation of experiments of end users.

### **Contributions that can be provided to the project**

UL will contribute to the measurement, modelling and evaluation mathematical teaching including direct and indirect learner feedback data analysis and modelling. These activities involve expertise on the measurement of learning outcomes and statistical analysis of results.

### **Reasons of involvement in the project**

Contribute and make progress on the field of quantified measurement of learning processes, their modelling and evaluation in a real environment.



## Contact Person's Experience and Expertise

Andrej Košir, PhD, b.s.c math is a full professor at the Faculty of Electrical Engineering, University of Ljubljana, head of User-adapted communications and ambient intelligence lab, and IEEE senior member. He is active in broad research fields including user modelling and personalization (user models, recommender systems, user data acquisition), socially intelligent communication applications (machine personality and emotions), user interfaces (machine learning methods, statistical modelling), and experimental design. Researcher with 1612 citations.

Gregor Strle, PhD, received B.A. in Philosophy and in M.A. Information Science from University of Ljubljana in 2002 and 2008, respectively, and his PhD in Cognitive Sciences from University of Nova Gorica in 2012. He is a research fellow at Faculty of Electrical Engineering (University of Ljubljana) and at Scientific Research Centre of Slovenian Academy of Sciences and Arts, and a research member of User-adapted communications and ambient intelligence lab. His research interest span across topics of cognition, social intelligence, affective computing, and human-computer interaction.

Urban Burnik, PhD is assistant professor at the Faculty of Electrical Engineering, University of Ljubljana. He lectures undergraduate courses in the fields of Digital Signal Processing, Telecommunications, Mobile communications, ICT and Multimedia. His research activities include multidimensional signal processing and telecommunications services. His recent research is oriented towards personalized multimedia interactive telecommunications systems and teaching technologies. He is active in national standardisation committee for Mobile Communications.

Janez Zaletelj, PhD, works as a teaching assistant at the University of Ljubljana since 2005. He received PhD degree from the University of Ljubljana in 2005. His research interests include image and video processing for remote sensing, depth sensing, recognition of human activities and behavior, and ambient intelligence and IoT technologies. He has developed several camera and 3D imaging systems, and has served as a project leader within EU-funded 6th Framework programme research project "Live Staging of Media Events".