

University of Ljubljana
Faculty of Computer and
Information Science



Prospective Student Day

Doctoral Study Programme Computer and Information Science (FRI)

Presented by Manca Žerovnik and Tomaž Curk



Why become a doctoral student at FRI?

Successful doctoral students



Mitja Trampuš, 2015
Google



Nejc Škoberne, 2013
CEO & Co-founder of Genialis

Miha Štajdohar, 2012
CTO & Co-founder of Genialis

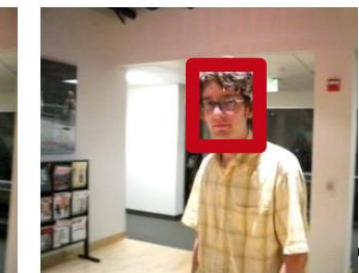
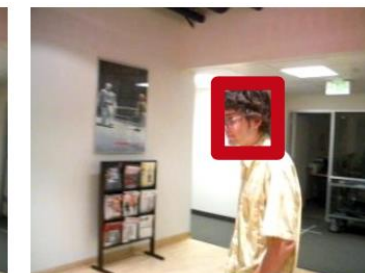
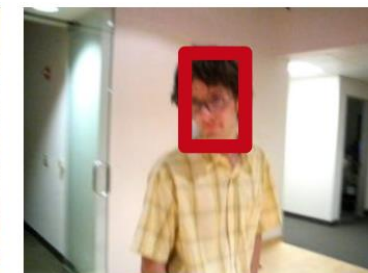
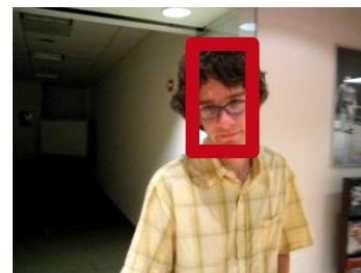
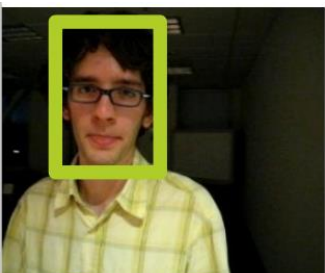
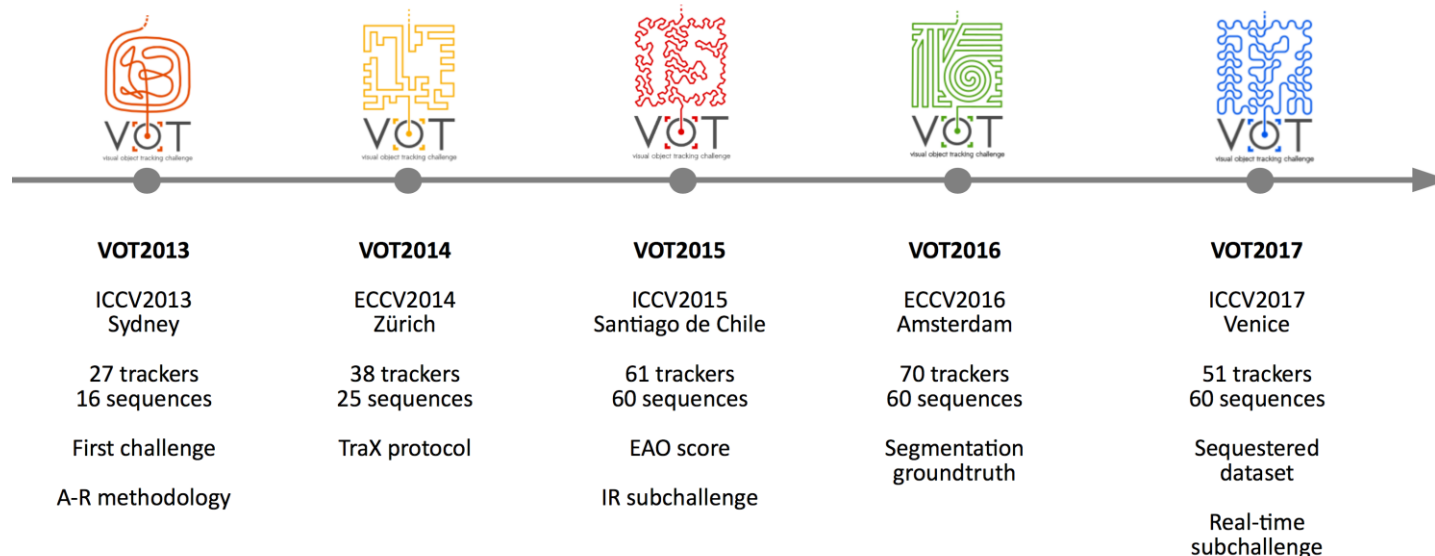


assist. prof. Marinka Žitnik,
2015 Stanford University and UL
FRI

VOT – Visual Object Tracking initiative

<http://www.votchallenge.net>

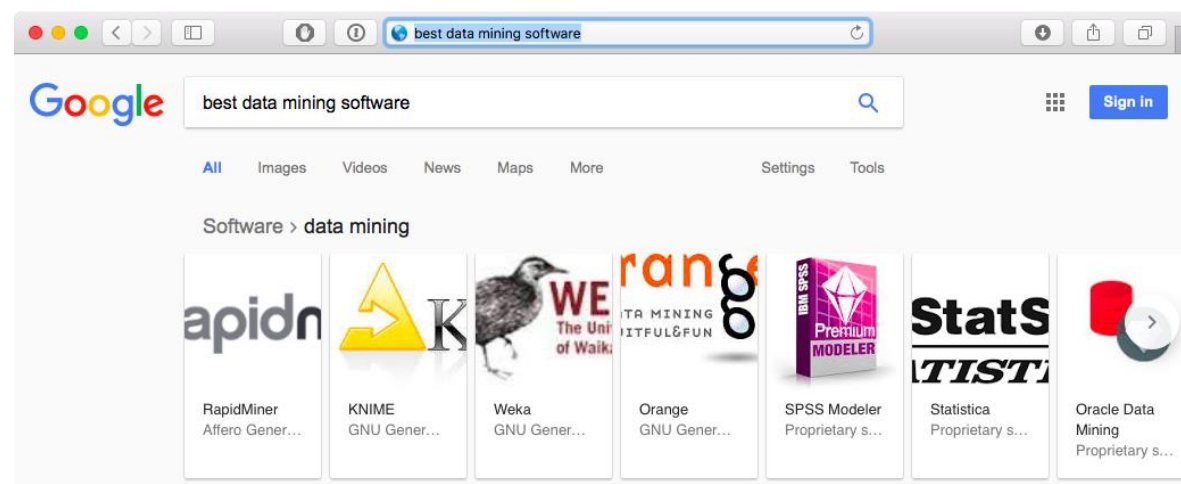
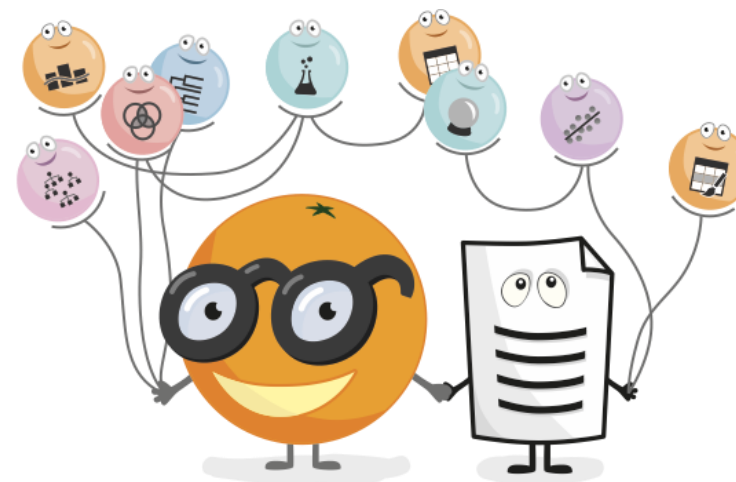
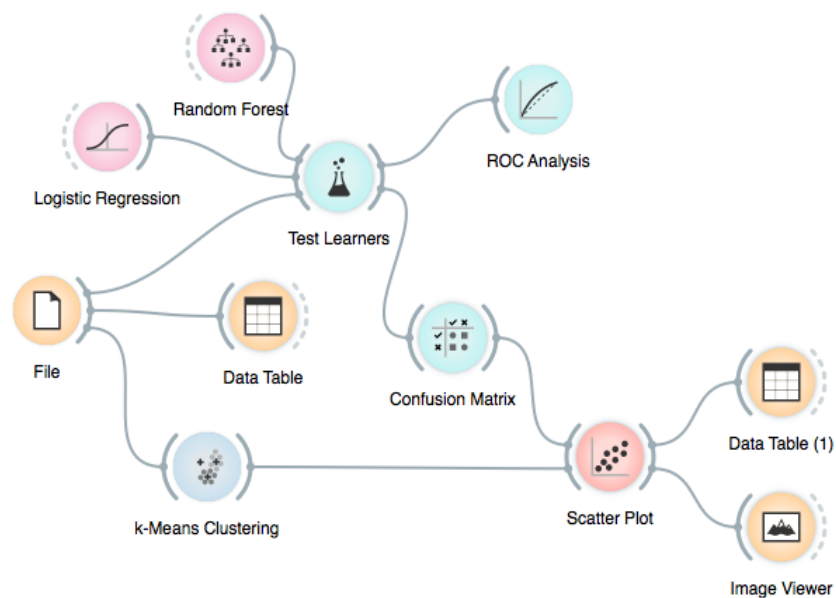
- ✓ Workshop papers with 100+ authors
- ✓ Github – 130 stars
- ✓ Mailing list – 240 subscribers
- ✓ Support forum – 150 members



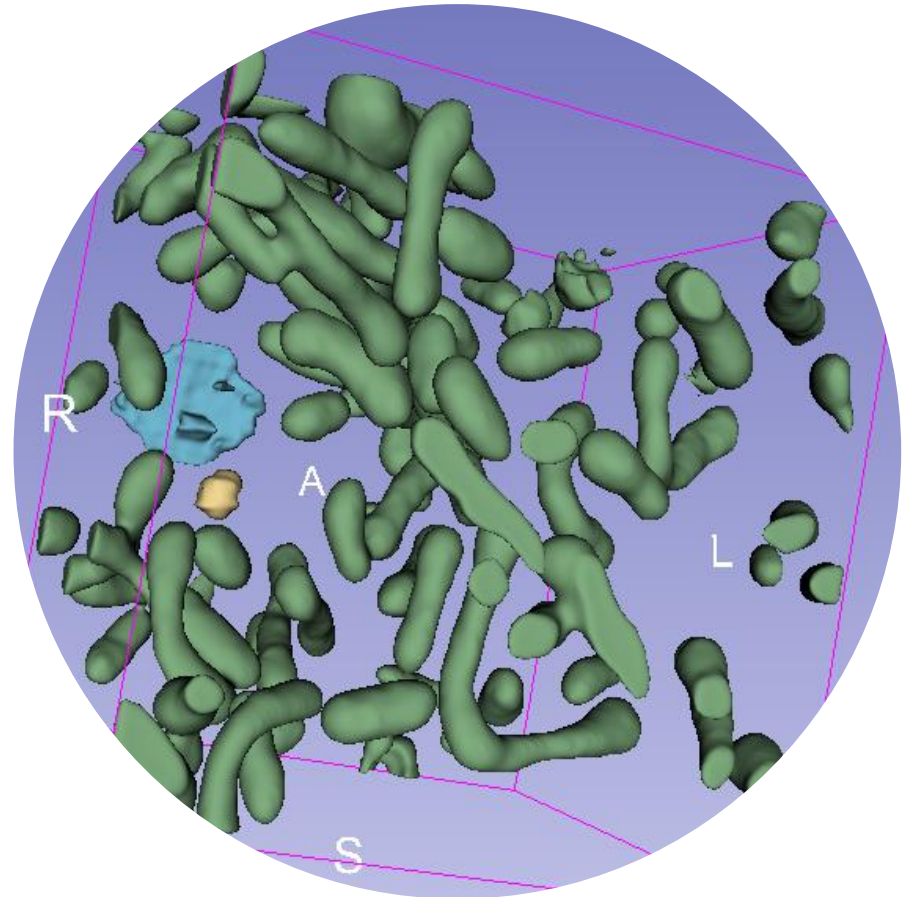
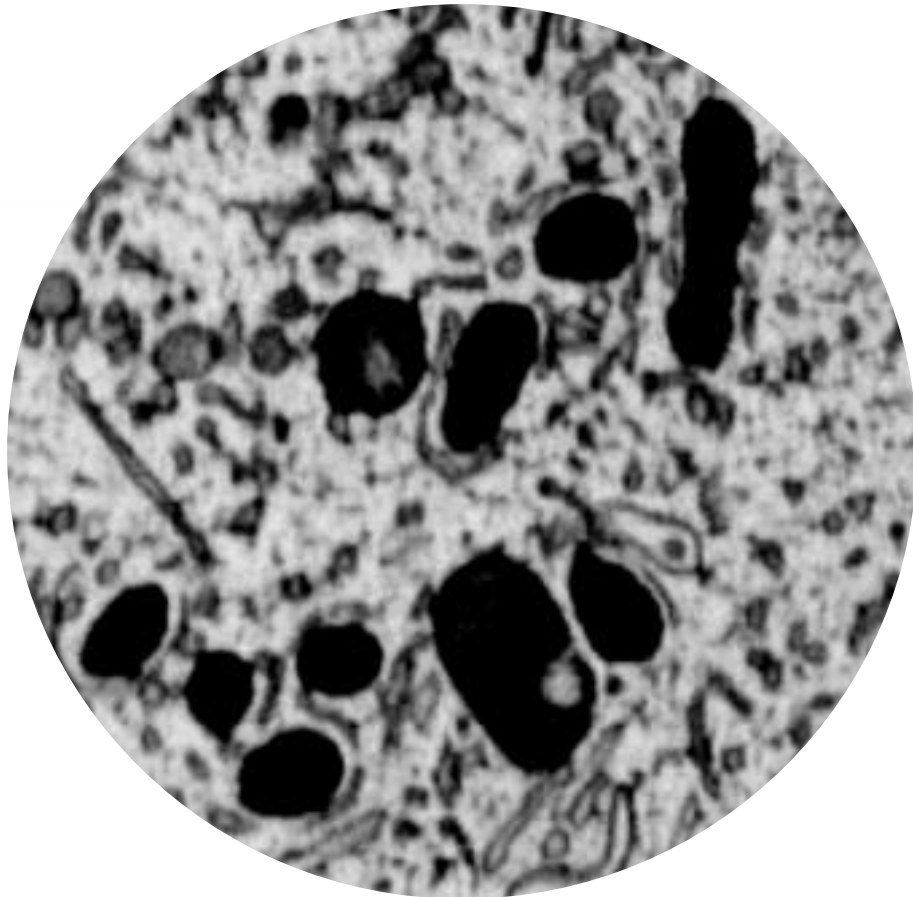
Orange Data Mining

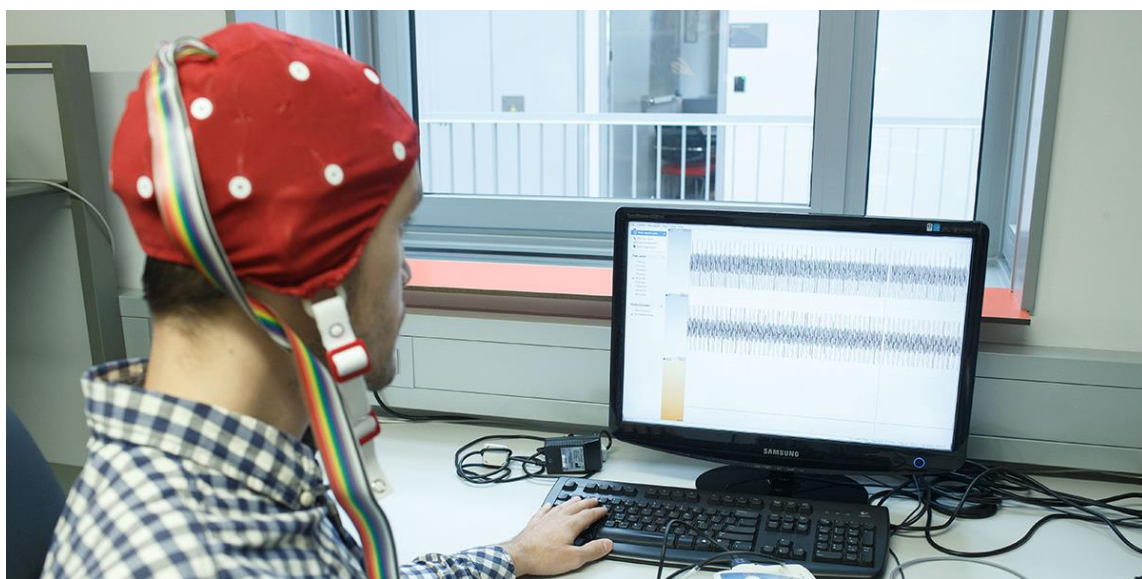
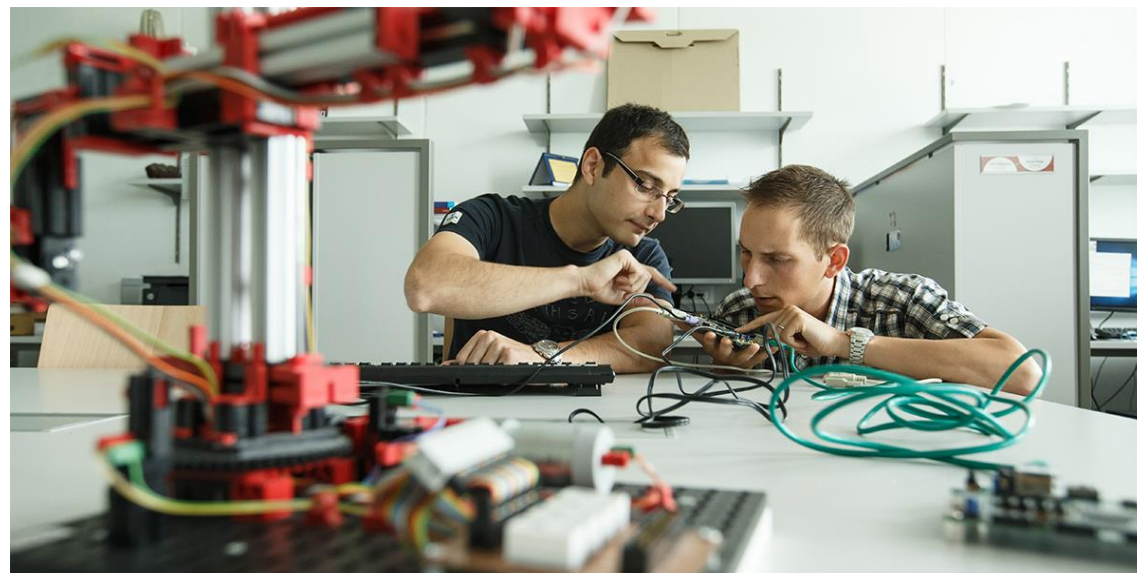
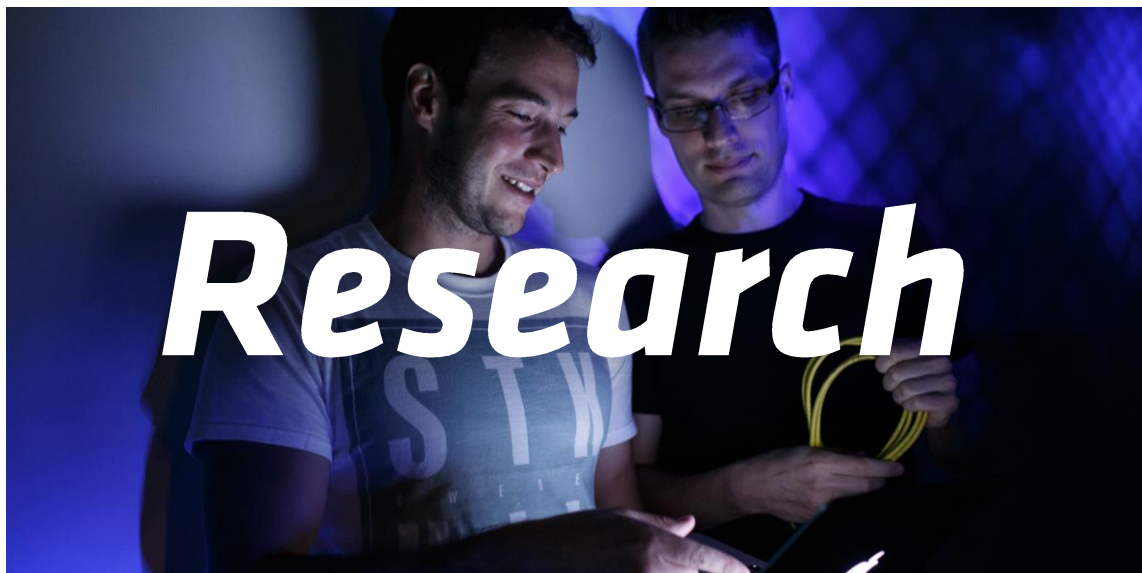
<http://orange.biolab.si>

- ✓ 1,000 daily downloads
- ✓ 3,400 Youtube subscribers
- ✓ 400,000 views on Youtube



3D Microscopy





Research in 19 Laboratories

Machine learning
and artificial
intelligence



Software
engineering and
informatics

Machine
perception and
multimedia

Systems and
networks

Theoretical
computer
science and
mathematical
methods

Computational
biology



Study Programme



1st Year



2nd Year



3rd Year



Elective Courses 2018/2019

- Mathematics for Machine Learning
- Incremental Learning from Data Streams
- Contemporary Approaches to Algorithm Design
- Selected topics on Cryptography and Computer Security
- Advanced Topics in Network Science
- Predictive Analytics for Structured Data
- Information System Integration Methods
- Advanced Algorithms for Search and Planning
- Machine learning for natural language processing
- Deep Learning for Computer Vision

PhD Advisors

<https://fri.uni-lj.si/en/phd-advisors>

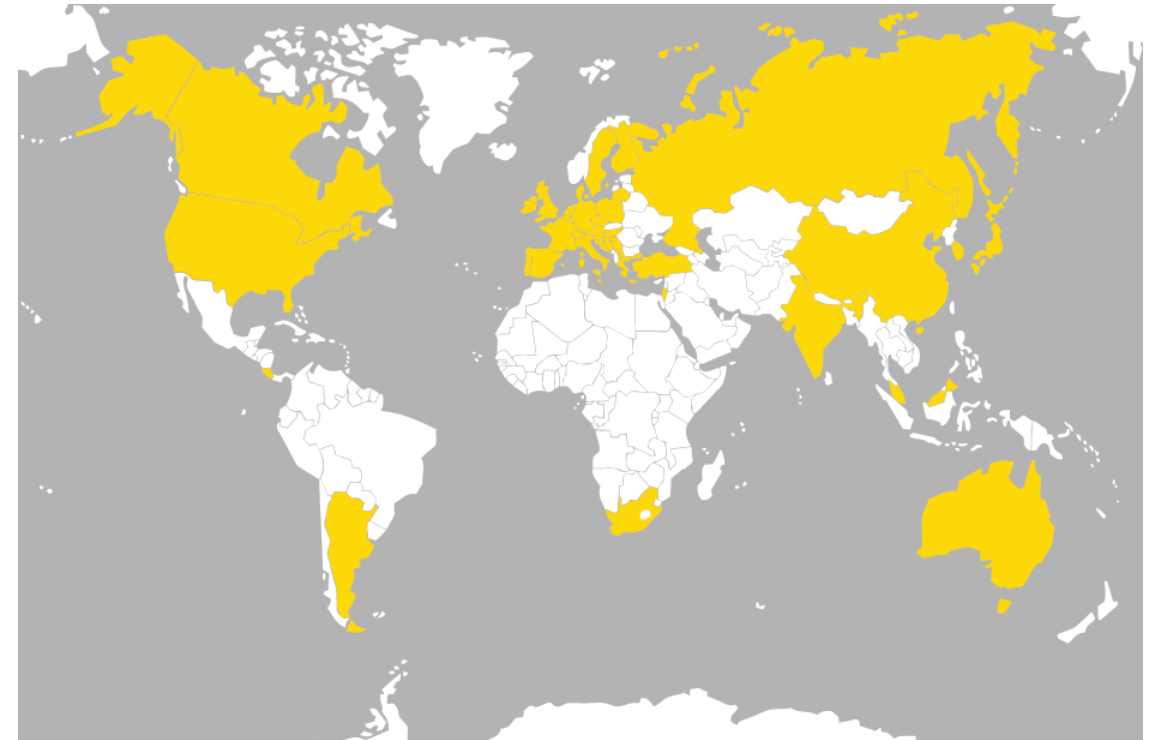
- Marko Bajec
- Zoran Bosnić
- Narvika Bovcon
- Ivan Bratko
- Andrej Brodnik
- Patricio Bulić
- Mojca Ciglarič
- Tomaž Curk
- Tomaž Dobravec
- Janez Demšar
- Gašper Fijavž
- Matej Guid
- Tomaž Hovelja
- Franc Jager
- Matjaž Branko Jurič
- Aleksandar Jurišić
- Igor Kononenko
- Matej Kristan
- Matjaž Kukar
- Dejan Lavbič
- Iztok Lebar Bajec
- Aleš Leonardis
- Uroš Lotrič
- Viljan Mahnič
- Matija Marolt
- Miha Moškon
- Miha Mraz
- Jurij Mihelič
- Polona Oblak
- Peter Peer
- Veljko Pejović
- Borut Robič
- Rok Rupnik
- Danijel Skočaj
- Franc Solina
- Luka Šajn
- Sebastijan Šprager
- Erik Štrumbelj
- Lovro Šubelj
- Marko Robnik-Šikonja
- Branko Šter
- Denis Trček
- Mira Trebar
- Damjan Vavpotič
- Nikolaj Zimic
- Blaž Zupan
- Marinka Žitnik

International Collaborations

Collaborations with world-renowned institutions:

- University College London (UK) – joint research in bioinformatics and mobile computing
- Baylor College of Medicine (USA) – joint research in bioinformatics
- DFKI, Saarbrücken (Germany) – joint research in computer vision
- Alpe-Adria University Klagenfurt (Austria) – joint research in compilers and algorithmics
- University of Belgrade (Serbia) – joint research in sport statistics and computational linguistics
- Kyungpook National University (South Korea) – joint research in computer vision and wireless computing, and a double degree study programme in computer science/electronics engineering

Internal fund for research and study visits abroad!



182 Total number of collaborating institutions



Open Positions and Scholarships

<https://fri.uni-lj.si/en/career-faculty>

- Researcher positions
- Junior researchers
- Teaching assistants
- Assistants
- Slovene Human Resources and Scholarship Fund

Researcher Positions

<https://fri.uni-lj.si/en/career-faculty>

- **Computer Communications Laboratory** (Mojca.Ciglaric@fri.uni-lj.si)
Virtualization, networks, security
- **Laboratory for Cognitive Modeling** (Zoran.Bosnic@fri.uni-lj.si)
Cardiomyopathy risk stratification with data mining
- **Laboratory for Integration of Information Systems** (Matjaz.Juric@fri.uni-lj.si)
Cloud-native architectures, microservices, blockchain
- **Laboratory for Cognitive Modelling** (Marko.RobnikSikonja@fri.uni-lj.si)
Machine learning and natural language processing
- **Bioinformatics Laboratory** (Blaz.Zupan@fri.uni-lj.si)
Data analysis and parallel algorithms for visualization of high dimensional data

Scholarship Opportunities

gorenje

Gorenje, d.d.

- Call for applications for a PhD scholarship in computer and information science for the following topic:
“Artificial intelligence driven test automation of embedded software“
- To improve the efficiency of tests in the future, Gorenje, d.d. is planning to upgrade their current testing process. The set of tests that are currently defined by a testing engineer will be in future generated automatically by a computer.

[Online application form](#)

Contact: **Barbara Mladovan** (Barbara.Mladovan@gorenje.com)

Joint Research Centre (JRC)

European Commission, DG Joint Research Centre, Directorate E - Space, Security and Migration.
Unit E.3 - Cyber & Digital Citizens' Security, Via Enrico Fermi 2749, 21027 Ispra (VA), ITALY

JRC Ispra employs 42 researchers, divided into three groups that cover:

- cyber security,
- transport security and
- law enforcement technology.

Research for EU strategy and policy advisors.

Researcher position, five year fixed contract, 2 years employed at FRI, 1-3 years employed at JRC.
Doctoral supervision by advisor from FRI and co-advisor from JRC.

Contact: **Tomaž Curk** (Tomaz.Curk@fri.uni-lj.si)

How to Apply to the PhD Programme?

Online at **eVŠ** portal <http://portal.evs.gov.si/prijava>

Master or pre-bologna equivalent study program

Application Enclosures

- a well-structured curriculum vitae
- a certified copy of your bachelor or master's degree
- a GPA certificate of exams and tutorials
- a motivation letter
- 2 recommendation letters
- advisor(s) preference

Important Dates

The deadline for application is **1 June 2018**

Enrolment will take place in **September 2018**



Coffee & Cookies

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doctoral.studies@fri.uni-lj.si

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