



BIPs Project Title:

## Advanced Tools for Multidisciplinary Machine Learning and Big Data : Data Science for future Medicine, Industry, Business, Education and Environment

MOBILITY PROJECT FOR HIGHER EDUCATION STUDENTS & STAFF:  
ERASMUS + BLENDED INTENSIVE PROGRAMS (BIPs)

Join an international, multidisciplinary and intensive training course in the field of data science and benefit from:

### ORGANISING INSTITUTION:

Technical University of Liberec, the Czech Republic  
[www.tul.cz](http://www.tul.cz)Contact person and project coordination:  
Dr. Athanasios Podaras ([athanasios.podaras@tul.cz](mailto:athanasios.podaras@tul.cz))

### COLLABORATING INSTITUTIONS:

- Faculty of Engineering, University of Kragujevac, SERBIA
- Electrical & Computer Engineering, Technical University of Crete, GREECE
- Department of Pre-school Education and Educational Design, School of Humanities, University of the Aegean, GREECE

## Main Topics

Applicable to Multiple Disciplines &amp; Scientific Domains - NOT LIMITED TO

| Machine Learning Fundamentals | Deep Learning |  
| Data Analytics and Feature Extraction | Big Data Manipulation | Data Modelling Databases and Data Warehouses | Multiscale Modelling |  
Augmented Reality | Signal and Image Processing | Multiscale Modelling |  
Modelling and Simulation | In Silico Trials

- a full data science course offered by experts in the domain
- being the first to participate in and experience from the ERASMUS+ MOBILITY BLENDED INTENSIVE PROGRAM (BIP)
- acquainting or improving data science skills and applying them to your field of study/research
- collaborating via discussions, exchanging of ideas with students from 3 different countries and 4 different institutions
- obtaining feedback from domain experts (lecturers) regarding your research work/thesis
- attending the course virtually (online) from your home institution and complete your training by visiting a summer school to the Czech Republic (Liberec)
- receiving an ERASMUS Certificate on Completed BIP and 3 ECTS credits

### Virtual Course (online):

Intensive 40 hours online course including theory and practical exercises. Projects will be assigned to the students at the end of the course to be prepared and presented at the summer school

### Summer School (offline):

5-7 days of Project Presentations, Discussions, Exchange of Scientific Ideas, Trips, Entertainment

### Main Instructors:

#### TECHNICAL UNIVERSITY OF CRETE, GREECE

Prof. Michalis Zervakis (Vice-Rector + TUC/ Electrical & Computer Eng. research team, Machine Learning Fundamentals, Feature Extraction, Bioinformatics and Biomedical Engineering, Signal and Image Processing)

#### UNIVERSITY OF KRAGUJEVAC, SERBIA

Prof. Nenad Filipovic, (Rector + Engineering faculty research team, Modelling and Simulation, Multiscale Modelling, Augmented Reality)

#### UNIVERSITY OF THE AEGEAN, GREECE

Prof. Chryssi Vitsilaki, (Rector + Research Team. "E-learning through Advanced Technologies")

CALL FOR STUDENT PARTICIPATION

**JOIN A COMBINED VIRTUAL (Online) and PHYSICAL (Summer School Event) COURSE**

### Important Terms and Deadlines:

**Deadline of Applications for Participation:**  
30/1/2022**Virtual Event:**  
March-April 2022  
(8 weeks - 40 hours)**Physical Event:**  
(Summer school in Liberec- Czech Republic):  
July 2022 (35 hours- 5-7 days )

### Expenses, Fees & Financial Support:

Participation in the Blended Intensive Program is free of charge. The attendance of the Summer School will be financed from the Erasmus program with:

- 70€ per day
- students with fewer opportunities receive a top-up amount of 100 EUR to the individual support, as well as the travel support
- Extra funding in case of green travel