

RESEARCH CENTERS



Research center:

“Research Center on Advanced Computational Technologies”

Acronym: AdvCompTech

Site : <https://stud.upm.ro/advcomptech>

Address: “Petru Maior” University of Tirgu Mures, 1 Nicolae Iorga street,
540069 Tirgu Mures, Romania – Rooms A303, L21

Faculty of Sciences and Letters

Department of Informatics

Telephone: +40 265 262275

Fax: +40 265 262275

Leader of RC: Associate Prof. Dr. Laszlo Barna IANTOVICS

Email Leader: ibarna@science.upm.ro

Email received by all the members: advcomp@science.upm.ro

Areas of expertise: Many real-life difficult problems require information systems able to perform advanced computations. The research center is focused on various real-life problems solving, including the healthcare, using different kind of information systems, algorithms and methods. The most important areas of expertise applied for different problem-solving include: Theoretical and Applied Artificial Intelligence; Intelligent Medical Systems; Applied Medical Informatics; Applied Bioinformatics; Critical Infrastructure Security and Resilience; Design of Critical Infrastructure; Security Systems; Cloud Computing Security; Intelligent Systems; Machine Intelligence; Numerical Methods; Theoretical and Applicative Aspects of Neural Networks; Heart Modeling and Simulation; Applied Statistics; Medical Imaging.

Significant running research directions/projects

Research Direction: “Protection of communications in natural gas transmission systems” (in the context of a running project); Coordonator PMU: Associate Prof. Dr. Eng. Béla GENGE

Research Direction: “Cyber security and resilience in networked critical infrastructures” (in the context of a running project); Coordonator PMU: Associate Prof. Dr. Eng. Béla GENGE

Research Direction: “Development of 3D computational simulation technologies of coronary circulation and myocardial perfusion based on fusion imaging” (in the context of a running project); Coordonator PMU: Prof. Dr. Eng. Sándor-Miklós SZILÁGYI

Research Direction: “Industrially Contaminated Sites and Health Network. Information Systems and Advanced Data Analysis” (in the context of a COST Action); Coordonator (member in the management committee) Contry Level: Associate Prof. Dr. Laszlo Barna IANTOVICS

Laboratories

Cisco Advanced Computer Networks Lab
Coordinator: Lecturer Dr. Bogdan CRAINICU
<https://erris.gov.ro/AdvancedComputerNetworks>

Control Systems Laboratory
Coordinator: Lecturer Dr. Eng. Adrian DUKA
<http://erris.gov.ro/Control-Systems-Laboratory>

Secondary actual research directions focused on some other topics related to advanced computations applied for different difficult real-life problems solving.