FACULTY OF SCIENCES

Artificial Intelligence Supporting Cancer Patients across Europe - ASCAPE

H2020 project

Dr. Dušan Jakovetić, Prof. Dr. Mirjana Ivanović, Prof. Dr. Vladimir Kurbalija, Dr. Miloš Savić, Prof. Dr. Nataša Krejić

The latest cancer statistics highlight encouraging advances in decreasing cancer-related mortality. However, given that one in two people will be diagnosed with cancer in their lifetime, and due to the growing and ageing population, the absolute number of people living with cancer is set to keep increasing substantially in the near future.

The main objective of ASCAPE is to take advantage of the recent ICT advances in Big Data, Artificial Intelligence and Machine Learning to support cancer patients' quality of life and health status. To achieve its objective, ASCAPE will create an open AI infrastructure that will enable health stakeholders (hospitals, research institutions, companies, etc.) to deploy and execute its AI algorithms locally on their private data. Any new knowledge produced by this process will be sent back to the open AI infrastructure. This way the knowledge will be shared among everyone while the medical data will remain private.

The services to be designed, piloted and deployed inside this project will include intelligent interventions for physiological and psychological support, improved patient and family counselling and guidance, early diagnosis and forecasts of ill-health, identification of disease trajectories and relapse, improved health literacy etc. ASCAPE will focus the training of the AI in two types of cancer, breast and prostate. This way, it will achieve enough coverage across genders as well as age groups, hence facilitating its ongoing improvements and applicability towards any type of cancer in the future.

The ASCAPE project will be developed in 36 months by a competitive consortium of 15 partners from 7 countries, which corresponds to a well-balanced structure, involving big companies, SMEs, research centres and universities. The project is coordinator by UBITECH, Greece, while Faculty of Sciences, University of Novi Sad is a partner institution.

More information about the project: www.ascape-project.eu