

## ESR10

### *ESR10 project title- Wearables for eHealth*

*Lead beneficiary (place of employment)* – University “Politehnica” of Bucharest, Romania

*Supervisory team* - Prof. Nirvana Popescu (University “Politehnica” of Bucharest, Romania), Prof. Antonio Iera (Università Mediterranea di Reggio Calabria, Italy) and industrial mentors: Dr. Oana Cramariuc and Dr. Bogdan Cramariuc (CITST - IT Center for Science and Technology, Romania)

*Project tasks and objectives:* To build a novel eHealth architecture based on wireless communication modules and links and wearable materials; to create advanced algorithms used for decision making and data extracting in the eHealth architecture; to prototype and test the proposed architecture using Arduino boards and Raspberry Pi-s. The ESR will also have the possibility to participate in the Advisory Board of the network (two ESRs are selected annually by voting among the 15 ESRs of the network). The ESR will also be involved in social media promotion of the network, such as Webropol surveys, Facebook and LinkedIn groups, Youtube video channels, Twitter and blogging.

*Mobility/cross-country and cross-sector secondments including industrial training:* 12 cumulated months at Università Mediterranea di Reggio Calabria, Italy and 3 months of industrial experience at CITST, Romania

*Eligibility:* MSc degree in a relevant degree obtained after Sep 2015 and not having lived or worked more than 12 cumulative months in Romania during Aug 2016-Aug 2019.

*Preferred starting date-* September 2019

*Trial period* - 6 months

*Target degree* –double PhD degree from University “Politehnica” of Bucharest, Romania and Università Mediterranea di Reggio Calabria, Italy

*Approximate gross salary* – about 2000 EUR/month for researchers without family (and about 2400 EUR/month for researchers with family)

#### *Working and living conditions in Romania*

**Romania** is an European country situated at the crossroads of Central, Eastern, and Southeastern Europe. It is a dynamic country, rich in history, arts and scenic beauty. Over the last decade Romania had undergone a significant development. Romania’s natural beauty and cultural diversity surprises each visitor. Bordering the Black Sea in South-eastern Europe, the country’s assets also include the Danube River and Carpathian Mountains. In the Prosperity Pillar rankings, Romania performs best on Safety & Security and Business Environment.

**Bucharest** is the capital and largest city of Romania, as well as its cultural, industrial, and financial centre. Bucharest is the sixth-largest city in the European Union by population within city limits, after London, Berlin, Madrid, Rome, and Paris. It is a safe place with its crime rate rather low in comparison to other European capital cities. Economically, Bucharest is the most prosperous city in Romania and is one of the main industrial centres and transportation hubs of Eastern Europe. The city has big convention facilities, educational institutes, cultural venues, traditional "shopping arcades", and recreational areas. The extravagant architecture and cosmopolitan high culture won Bucharest the nickname of "Little Paris" of the East. It is the labyrinth of narrow cobblestone streets and architecture of times-gone-by of Bucharest’s old town that attracts visitors in droves to linger in the antique shops, cafes, and galleries.

**University POLITEHNICA of Bucharest** (UPB) is the oldest and the most prestigious engineer university in Romania consisting of 15 faculties. With a tradition of 200 years made possible by the efforts of some of the greatest Romanian professors, its specificity relies in creating knowledge through research and technological innovation, as well as through its implementation by means of education and professional

training at a European level. UPB supports multi- and interdisciplinary research and development, providing 47 research centres and 71 advanced research laboratories equipped at high-performance standards for researchers, professors and students. Inside UPB, the mission of the Faculty of Automatic Control and Computers and Faculty of Electronics, Telecommunications and Information Technology is to empower high-quality scientific research, to share knowledge through education in the domains of Computer Science and Information Technologies, Systems Engineering, Electronics and Telecommunications as well as to offer a stimulating, high-level professional and social environment to the students and academic staff within the faculties.

*Information about the industrial partner* – CITST is a Romanian research oriented SME established in 2007 in Bucharest. CITST is running several R&D projects in the fields of IT, Ambient Assisted Living (AAL), robotics and user-oriented services. CITST is gathering a multidisciplinary team of engineers and researchers who are actively participating in R&D projects in collaboration with industry and academia. CITST personnel has a wide experience in both national and EU projects as well as in private mandates ranging from few months up to 3 years duration. The activities planned during the secondments at CITST are: i) implementation of advanced algorithms for decision making based on eHealth data; ii) Testing of the proposed algorithms on various prototypes.

Some useful links:

<https://theculturetrip.com/europe/romania/articles/the-12-most-beautiful-spots-in-romania/>

<http://romaniatourism.com/>

<https://www.uncover-romania.com/>

<https://upb.ro/en/>

<http://international.upb.ro/>

*Additional information:*

The selected ESR for this position will have to additionally complete these steps after she/he gets the positive decision about her/his application, in order to comply with the Italian legislation on registering to a double PhD degree with an Italian university:

1. Those who are in possession of a foreign academic qualification, which has not already been declared equivalent to an Italian degree, have to enclose all the documents translated and legalized by the competent Italian representation in accordance to the set of rules in force relating to the admission of foreign students to the courses in Italian Universities, which are useful to enable the Commission that guarantees admission to the doctoral program, to assess the equivalence in compliance with current legislation in this field in Italy and in the country where the qualification was issued and with the treaties or international agreements concerning the recognition of qualifications for further studies.
2. Non-EU citizens will have to enclose to the application form all the titles translated and legalized by the Italian Embassy in accordance with the applicable standards for the admission of foreign students to Italian Universities