POSITION: RESEARCH LEADER IN SATELLITE IMAGING AND REMOTE SENSING

Who we are

BioSense Institute cross-fertilizes two vital sectors of today: ICT and agriculture. Recognizing that ICT plays a pivotal role in ensuring sustainable, smart and inclusive growth of agriculture, we focus on multidisciplinary, game-changing and needs-driven research in nano and microelectronics, new materials, communications, signal processing, remote sensing, biosystems, artificial intelligence, robotics, IoT and big data, driven by our desire to make a significant impact to the society in which we live in.

BioSense Institute has been recently ranked as No.1 Centre of Excellence in Europe in the course of the prestigious Horizon 2020 Teaming Call and has been awarded a grant of 28 M€ that will be invested in developing state-of-the-art research infrastructure and attracting global talent.

BioSense Institute is situated in Novi Sad, Serbia. Novi Sad is a friendly and safe city of approx. 350.000 inhabitants in the north of Serbia, on the banks of the Danube river, facing the northern slopes of Fruška Gora mountain. Due to the combination of a vibrant social and cultural life with particularly favorable cost of living (for details please check https://www.numbeo.com/cost-of-living/), Novi Sad is an ideal choice for a broad range of people, from busy single professionals to families with schoolchildren.

General Requirements: Highly experienced, senior (8+ years since obtaining the PhD in a relevant field), with an innovation-driven mentality, game-changer, capable of opening new research avenues, leading a team of researchers and expanding our international network of contacts, good track record in high-impact publications and in attracting funding under conditions of global competition. Excellent English.

Understanding of challenges in the global agrifood sector is desirable.

Earliest Starting Date: October 2017

Contract Duration: up 6.5 years (with a possible extension or a permanent (tenure) position based on the performance;)

We Offer:

- The ability to make a difference in a dynamic and rewarding working environment in a top-ranked European Centre of Excellence
- The opportunity to develop own research team and pursue own cutting-edge research directions
- The potential to commercialize research results through strategic collaborations with industry and multi-faceted support from in-house Business Development Department
- Favourable cost of living and advanced quality of life
- Full administrative support in relocation for the entire family

Specific Requirements: In-depth theoretical knowledge with proven practical competences and a long-standing experience in one of the following fields (or similar): remote sensing, satellite image processing, multi-dimensional image processing (multispectral, hyperspectral), data fusion, machine learning. Experience in: Phyton, GDAL, Matlab, IDL, QGIS, Google EE, and/or ENVI. Strong ability for interdisciplinary research. Experience in satellite imaging in agriculture, design and validation of biophysical variables and vegetation indices derived from satellite and airborne multispectral/hyperspectral instruments as part of their calibration and quality assessment process would be an asset but is not required.

Research Description: Use of optical and SAR satellite images to better understand and model various processes in agriculture (plant, soil, water), hydrography, forestry, environment, etc. Satellite-image-based crop structure detection, yields estimation. Detection of land-use and land-change. Development of novel data-based products for use in agriculture. Modelling of energy exchange

between plant and environment. Design and development of user oriented scalable and elastic system targeting different application scenarios in agriculture and environment monitoring.

Number of Positions: 1

Submit your applications including a detailed CV, list of publications and any other relevant information to jobs@biosense.rs

Informal enquiries should also be sent to jobs@biosense.rs