

## **POSITION: RESEARCH LEADER IN MULTISPECTRAL/HYPERSPECTRAL IMAGE PROCESSING**

### **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 and experimental competences and a long-standing experience in one of the following fields (or similar): image processing, multispectral/hyperspectral imaging. Strong ability for interdisciplinary research. Experience in imaging of agricultural products and food including the acquisition and provision of soil and vegetation spectral libraries and spectra simulation in the process of characterization of commercial and in-house made instruments would be an asset but is not required.

**Research Description:** Detection of various biological phenomena using multi/hyperspectral imaging, development of various applications of multi/hyperspectral imaging in agriculture production, food processing, packed and unpacked foods, other biosystems. Modelling of physical processes in interaction between soil, plant and sun and their influence on measurement requirements for specific instruments in different use scenarios oriented towards field applications. Design of predictive models

based on image derived information. Development of specific elements as part of dedicated robotic platforms.

**Number of Positions:** 1

**Submit your applications** including a detailed CV, list of publications and any other relevant information to [jobs@biosense.rs](mailto:jobs@biosense.rs)

Informal enquiries should also be sent to [jobs@biosense.rs](mailto:jobs@biosense.rs)