

POSITION: EVOLUTIONARY ALGORITHMS EXPERT

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, IoT and big data, driven by our desire to make a significant impact to the society in which we live in. BioSense Institute has coordinated or participated in a large number of international research projects, including over 30 H2020 projects.

Through the project ANTARES, the first ranked in the course of the prestigious Horizon 2020 Teaming Call, BioSense Institute is funded with 28 M€ to become European Centre of Excellence for advanced ICT solutions in agriculture. The project budget is dedicated to the attracting global talent as well as to the construction of the new building and purchase of the state-of-the-art equipment.

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.

Description of work:

BioSense has been working on a number of optimisation problems which include the selection of seed varieties, optimisation of the crop configuration, smart irrigation and development of other decision-support systems in agriculture. These problems often have many objectives, such as profit increase, risk decrease, climate resilience, logistics optimisation, minimisation of the ecological footprint etc. and have to be solved within the many-objective portfolio optimisation paradigm. The candidate should be able to set up the optimisation problem and solve it through the use of NSGA-2, NSGA-3, MOEA/D or other similar algorithms. Knowledge in the field of neuroevolution and ambition for its application in DNNs for agricultural image processing, is a bonus.

Requirements:

This position requires in-depth knowledge in the field of data science and evolutionary computation. The candidate should have at least 5 years of experience in this domain and hold a PhD in the field of Computer Science, Data Science, Applied Mathematics or other related areas. The candidate is expected to have leadership skills and to coordinate a small team of junior researchers.

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 work in a team comprised of renowned experts and using state-of-the-art laboratories
- The possibility to develop own research team and pursue own cutting-edge research directions
- Favourable cost of living and advanced quality of life
- Full administrative support in relocation for the entire family

Earliest Starting Date: January 2020

Contract Duration: up to 4 years (with a possible extension or a permanent (tenure) position based on the performance)

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