

## Young Researcher position

**Mentor:** prof. dr. Zoran Bosnić

**Field:** artificial intelligence, machine learning

The candidate for the junior research shall develop new approaches in the field of machine learning within the artificial intelligence. He/she shall focus on two actual research fields: incremental learning from data streams and semi-supervised learning from only partially labeled datasets.

The first subfield is of a key importance for making timely predictions in big data environments, where data arrives sequentially (e.g. sensor readings, bank transactions); the second subfield plays a vital role in improving predictive accuracy in environments, where labeling of examples is costly or infeasible (e.g. medicine).

In his/her work, the candidate shall merge the benefits of both subfields by developing novel methods for semi-supervised learning in incremental environments. He/she shall propose different approaches for using unlabeled examples for improving accuracy of predictive models. The proposed methods will have a significant usability impact in medicine (oncology, cardiology, psychology), bioinformatics and industry (electricity load prediction), where predictive accuracy plays a vital role. The described merging of subfields is actual and opens numerous research questions, from which novel contributions to science can arise.

The candidate is expected to have a knowledge in programming, fluency in English language, interest in artificial intelligence and research curiosity.