## **Open position for data scientist at Faculty of information studies**

Faculty of information studies is looking for a highly motivated candidate with background in computer science, mathematics/statistics, physics or quantitative social sciences. Education requirement is Master's degree (2nd level Bologna) or higher. The candidate will be employed in our research project funded by the Slovenian Research Agency (abstract below). The work will consist of two main directions. First, the candidate shell analyze the data of EEG measurements using state-of-the-art network science methodology. Second, the candidate will analyze a variety of datasets and repositories on immigration and pertaining social dynamics. All needed resources are available at our faculty, including High performance computer with 1000 cores. The employment is full-time for one year with all benefits and stimulative salary, extension is possible, depending candidate's performance. Employment can start immediately, i.e. as soon as possible. To apply send your CV to project.office@fis.unm.si

Understanding immigration and integration through interdisciplinary models of social dynamics. Immigration is among the foremost social and political issues of our time. Responding justly to the moral imperative of accepting immigrants, their inflow into Slovenia and other EU countries has become ubiquitous. But newcomers often bring cultural assumptions and practices that differ sharply from the traditional norms of the host society. How will immigrants be perceived by the natives depends on a number of factors, the critical among them being the relationship between the rates of their inflow and their integration in the host society. When the inflow is low the host majority welcomes the newcomers as they become the integral part of the host society and enrich its diversity. But when the inflow rate suddenly increases without the corresponding increase of the integration rate, host majority can become less welcoming to the point of hostility towards new immigrants. This is clearly verified by recent record votes of rightwing populist parties in several EU countries that promised to close borders completely to immigration. However, historic record teaches us that growth of right-wing populism that is not kept in check can lead to dire consequences, when closed borders become the least of our worries. How to simultaneously respond to the moral and human imperative of accepting and integrating new immigrants, while guaranteeing political and social stability and preservation of democracy in our country and in EU? To answer this question we should gain a better quantitative understanding of the intricate interplay between the processes of immigration and integration in the European societies. The goal of this project is to develop a novel interdisciplinary framework for predictive modelling and analysis of complex social phenomena, such as the processes of immigration and integration. Our framework will be built by integrating the theoretical knowledge about immigration from social sciences while relying on the powerful modelling apparatus from statistical physics and data science. Scientifically this represents a highly interdisciplinary endeavour, where social, natural and computer sciences play their roles, enhanced by the unprecedented availability of data on people's behavioural patterns and practices.