

## eSSENCE invites for Letters of Interest Post-doctoral fellows AI for the sciences: New e-Science methods and tools

### Background

eSSENCE is a strategic research program in e-Science set up in cooperation between Uppsala University, Lund University, and Umeå University. eSSENCE was created as a result of a governmental initiative to promote e-Science research of the highest international quality, contributing towards fulfilling major needs and solving important problems in society. The overall mission of eSSENCE is to build a research environment that will lead to new e-Science methods and tools for use in key strategic areas of importance for science, industry, and society in a long-term perspective.

The eSSENCE@UU research program is anchored in the strategy of Uppsala University and supports a span of important research activities and projects. To further support the strategic development of research within the university, eSSENCE@UU has decided to fund a number of Post-doctoral fellows performing research on new e-Science methods and tools in connection to the planned university-wide initiative on *Artificial Intelligence for the Sciences*.

### Invitation

eSSENCE@UU invites for Letters of Interest as a means to identify projects to receive funding from eSSENCE for 2-year post-doctoral fellowships. These post-doctoral fellows should perform research on new e-Science methods and tools within the field of Artificial Intelligence for the sciences. Here, Artificial Intelligence (AI) refers to systems that display intelligent behavior by analyzing their environment and taking actions - with some degree of autonomy - to achieve specific goals. The main reason for the upswing in AI over the recent years is due to the vast availability of data. The sub-field of Machine Learning (ML) allows us to put all this data to work. ML gives the computers the ability to learn without being explicitly programmed for the task at hand. With this call eSSENCE aims to support the long-term development of the AI/ML field and its applications to solve challenging problems in the sciences by providing support for research on new e-Science methods and tools.

The plan is to support 3-5 post-doctoral fellows, each with 500 kSEK/year during two years starting early 2020. The proposals will be prioritized by the eSSENCE Management Group after reviews of the LoIs provided by the eSSENCE partners at Lund and Umeå.

### Formalia

The letter of interest should be *maximum 3 pages long* describing the goal and importance of the project. The reviews and the prioritization will be based on:

- The contribution to the development of new e-Science methods and tools within the field of Artificial Intelligence for the sciences
- The status concerning the post-doc candidate (Does a candidate exist? If yes – supply credentials for this person. If not – describe the recruitment plans.)

The letter-of-interest should be submitted to *coordinator@essenceofscience.se* no later than **Tuesday November 12 2019 at 23:59**.