

Press release

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00 Basic statistical data and overviewsCompetence centre for data science

Statistical methods, data science and artificial intelligence: the FSO and UniNE intensify their cooperation

The University of Neuchâtel (UniNE) and the Federal Statistical Office (FSO) are reinforcing their cooperation in the field of data science and statistical methods. In January, both institutions signed a cooperation agreement for the period 2021-2024. This news comes in the wake of the creation of a new Data Science and Statistical Methods division at the FSO and a new chair in data science at the UniNE. The aim is to promote the research and development of concrete projects in the digital field.

The FSO is currently developing a structure to meet the challenges of the digitalisation of data science and statistical methods. A new division has been created to oversee this area. Over the next few months, the establishment of a competence centre for data science will make it possible to meet the needs of the whole of the Confederation with services ranging from consulting and training to methodological support or the complete implementation of projects in this field.

UniNE will create a chair in data science with a focus on research in artificial intelligence. The newly hired person will have the task of developing scientific projects of international scope within the Computer Science Department.

Projects to improve quality and efficiency

The cooperation between the FSO and UniNE has been in place for around twenty years. In particular, it has enabled the statistical institute to publish around ten doctoral theses and a large number of articles in peer-reviewed scientific journals. For the FSO, this partnership has led to a system of burden sharing for surveys at both enterprise and individual level, as well as many improvements in employment and wage statistics, for example.

The launch of the pilot projects described on the FSO's "experimental statistics" microsite has enabled a new stage to be reached. These innovations should help to further increase the efficiency of current techniques. For example, the ADELE ("Arealstatistik Deep Learning") project which uses artificial intelligence techniques in the context of recognition of aerial images for the national land use statistics, clearly illustrates the potential for automation and thus productivity gains.

Increased attractiveness thanks to data

For UniNE, the great diversity of the topics dealt with at the FSO, their specific issues and, above all, access to real data (secure access and a data protection contract being required for the implementation of each project) is a source of inspiration which helps to attract a large number of researchers. The staff who collaborate under this agreement, most often doctoral and/or post-doctoral students, thus see the results of their research find direct application in the FSO's statistical production.

This example of partnership is not an isolated one. The FSO also cooperates in the field of data science including in artificial intelligence with other universities and universities of applied sciences in the country and also with the two federal institutes of technology and their Swiss data science centres.

A resolutely forward-looking vision

In order to intensify this cooperation, the FSO has launched an internal call for new projects in the future field of data science and statistical methods. This approach should make it possible to cover the numerous topics dealt with at the FSO and provide an opportunity to develop cooperation in concrete projects such as those concerning, for example, codification or the processing of missing data and/or outliers.

Information

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Reference documents

Competence centre for data science

Competence centre for data science (DSCC)

Experimental statistics:

https://www.experimental.bfs.admin.ch/expstat/en/home/experimental-statistics-fso/index.html

The FSO is celebrating 20 years of its establishment in Neuchâtel:

Press release

Online

Statistics counts for you: www.statistics-counts.ch

NewsMail subscription in German, French and Italian: www.news-stat.admin.ch

FSO website: www.statistics.admin.ch