

## **Do data science for good**

Are you passionate about Data science? Do you want to participate in research that can benefit patients in the world?

The Uppsala Monitoring Centre is a dynamic non-profit foundation with the ambition of improving the safety of medicines throughout the world. By managing and analysing the WHO global database of more than 21 million reports of adverse effects from patients and health care professionals in more than 130 countries, UMC has a unique position for detecting unwanted side-effects of medicines, in which it is recognized internationally.

UMC is opening master thesis positions in the Spring 2020. We are looking for creative and driven students with a keen interest in Data science and/or statistics. We have a variety of possible projects, covering different fields depending on the students' interests: machine learning, natural language processing or statistics. Below is a non-exhaustive list of project suggestions:

- Improve our existing cluster algorithm of side effect reports
- Explore the free text descriptions of side effect reports with topic modelling
- Develop a predictive algorithm to find patients with specific conditions (e.g. diabetes, pregnancy) within our database
- Identify sections of text with important medical information
- Automatically generate useful summaries of side effect reports

## **Who you are**

- You are enthusiastic and want to solve meaningful problems
- You are analytical, curious, independent and have an inquisitive mind
- You have a good understanding of machine learning and/or statistics
- You have experience of programming in Python, R or similar
- You have a strong mathematical background

## **More about UMC**

Our vision is a world where all patients and health professionals make wise therapeutic decisions in their use of medicines. Our mission is to support and promote patient safety through effective global pharmacovigilance practice.

Located in the heart of Uppsala, three minutes away from the rail and bus stations, we are currently around 110 employees and consultants. We are a centre of scientific excellence, and our data science research has been rewarded internationally and recognized. For more information about our activities and products, visit [www.who-umc.org](http://www.who-umc.org).

*If you have questions about the projects, contact Dr Lucie Gattepaille, Data Scientist, +46 (0)18-65 60 60.*

You are welcome to submit your application (CV, motivation letter and copy of grades) in an e-mail entitled *Master-Spring2020* at [thesis@who-umc.org](mailto:thesis@who-umc.org), by **November 24<sup>th</sup> 2019 at the latest**. Please apply as soon as possible, as we continuously process applications.