

Research Internship in Machine Learning for fossil data analysis

Fossils are preserved remains or traces of animals, plants, and other organisms from the remote past. The fossil record gives clues about the history of life and environmental changes over millions of years, it helps to understand environmental change, biological and ecological processes and can be used to reconstruct past climate and human impact on the environment.

Fossil record is “big data” in a sense that it comes from many different sources, it is biased due to how fossils preserve and how they are collected, identification is interpretation based and uncertain in many ways, records are of varying quality over time.

We are looking for a student/early career researcher with a background in machine learning/ data mining and interest in life science applications to join a research project on better understanding fossil data. The goal is to analyze potential biases in fossil data and develop methods for correction using machine learning techniques. From the machine learning perspective, the task is to design and implement active learning algorithms (preferably in R or Python) for modeling fossil collection biases via a crowd-sourcing experiment (a simple web-app to be developed). **The project offers an opportunity to do a Master’s thesis**, but it is not mandatory.

We offer a full-time employment for 3-4 months during the summer with a possibility to continue on a part time basis in autumn. The position is at the University of Helsinki jointly at the Department of Computer Science and the Department of Geosciences and Geography, Kumpula campus, Helsinki.

If you are interested, please get in touch with Indre Zliobaite indre.zliobaite@helsinki.fi by March 1 or earlier. Applications will be considered as they come until the position is filled.

More about our research: <http://www.zliobaite.com/fossils>

More about fossils: <http://africanfossils.org/>

More about where fossils come from: <http://fossilfinder.org/>