





## ERC-funded Postdoc Position at the Faculty of Electrical Engineering and Computer Science, Technical University of Berlin, Germany

We are looking for highly motivated and outstanding PostDoc researcher to join our new group at TU Berlin. The PostDoc position will be financed by the ERC-funded BigEarth project: BigEarth - Accurate and Scalable Processing of Big Data in Earth Observation (http://bigearth.eu/index.html).

## **Topic: Multi-Modal Remote Sensing Image Search and Retrieval**

During the last decade, a huge number of Earth Observation (EO) satellites with optical and Synthetic Aperture Radar sensors onboard have been launched and advances in satellite systems have increased the amount, variety and spatial/spectral resolution of EO data. This has led to massive EO data archives with huge amount of remote sensing (RS) images with different modalities, from which mining and retrieving useful information are challenging. In the view of that the research activity of the successful candidate will focus on development of accurate and scalable multi-modal remote sensing image indexing and retrieval methods. In particular, the successful candidate will develop novel deep hashing networks and related tools that will extract and exploit complementary information among different RS image modalities in the framework of scalable content based RS image retrieval problems.

## All applicants should have:

- Ph.D. degree in Computer Science, Engineering or Applied Mathematics.
- Extended knowledge in the areas of machine learning, deep learning, remote sensing and/or computer vision.
- Highly motivated and creative.
- A strong publication record in machine learning and/or remote sensing journals and conferences in one or more of the following areas:
  - o Image search and retrieval
  - Object recognition
  - Deep learning
  - o Kernel-based methods
  - o Multi-modal learning
  - SAR, multispectral and/or hyperspectral image analysis
- Excellent communication skills in English.
- Solid programming skills and solid mathematics knowledge (especially linear algebra and statistics).

Preferred starting date: 01/07/2018 (it is negotiable)

**Duration:** 2 years

Contact: Prof. Dr. Begüm Demir (demir@tu-berlin.de)

Please send applications via email, including:

- a complete CV with the list of publications
- two reference letters

There is no strict deadline and the position will remain open until it is filled.