2-year Postdoctoral position on deep learning, satellite imagery and marine biodiversity, IMT Atlantique/Lab-STICC, Brest France

Positions: 24-month position in OceaniX group at IMT Atlantique/Lab-STICC, Brest, France

Expected starting date: From April 2022.

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Context and objectives: This postdoc position is opened in the OceaniX group at IMT Atlantique/Lab-STICC (https://cia-oceanix.github.io/), a group dedicated to physics-informed AI for the monitoring and surveillance of the oceans. OceaniX chair gathers an interdisciplinary group with expertise in numerical modeling, applied math deep learning, remote sensing and ocean science to leverage AI technologies and paradigms to address key challenges in ocean modeling and forecasting, observing system design and control, surveillance and monitoring of maritime activities. OceaniX chair also benefits from strong academy-industry partnerships (e.g., Ifremer, CNES, CLS, NavalGroup, Eodyn, OceanDataLab).

The position is opened in the context of FISH-PREDICT, a project funded under a national initiative on AI for biodiversity supported by the French National Research Agency ANR (Challenge AI-Biodiv:

https://anr.fr/en/call-for-proposals-details/call/challenge-ia-biodiv-research-in-artificial-intelligence-in-the-field-of-biodiversity/). FISH-PREDICT gathers an interdisciplinary consortium with expertise in biodiversity science and computer science, with the aim to promote cross-fertilization of these two research fields. FISH-PREDICT aims to develop new AI-based approaches to monitor coastal biodiversity (fish species in particular). In this context, the successful candidate will specifically explore new deep learning methods for the extraction of human pressure indicators from remote sensing images and the representation of complex coastal ocean dynamics.

The position will be based in Brest, a city at the forefront of marine sciences research and development in France, with major research organisations and industry partners.

Skills: Applications are encouraged from candidates with a Ph.D in applied math/machine learning/data science/imaging science. A strong interest in marine science and/or ecology are welcome. Candidates should have a strong interest and commitment to research. Creativity with an aim towards independent research is highly emphasized.

Application: Send CV, statement of research interests and the contact information of at least two references to <u>ronan.fablet@imt-atlantique.fr</u> and <u>rodolphe.devillers@ird.fr</u>. Review of applications will begin immediately and continue until the position is filled.

Specs: The position will initially be funded for a 2-year period and could be renewed upon scientific outcome and funding availability. The net annual salary will range from 30,000€ to 36,000€ per year depending on experience. This position is open to non-EU citizen.