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

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

Expected starting date: From April 2022.

Contact persons: Ronan Fablet, Professor IMT Atlantique, ronan.fablet@imt-atlantique.fr; Dr Rodolphe Devillers, Senior Scientist IRD, rodolphe.devillers@ird.fr

Context and objectives: This postdoc position is opened in OceaniX group at IMT Atlantique/Lab-STICC (https://cia-oceanix.github.io/) 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 the strong academy-industry partnerships (eg, Ifremer, CNES, CLS, NavalGroup, Eodyn, OceanDataLab…).

The position is opened in the framework of FISH-PREDICT project, which is part of a large-scale national initiative about AI for biodiversity supported by the French National Research Agency (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 project gathers an interdisciplinary consortium with expertise in biodiversity science and computer science with the aim to promote cross-fertilization of these two research fields. The main scientific objective of the FISH-PREDICT project is 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 satellite imagery and the representation of complex coastal ocean dynamics.

Skills: Applications from candidates with a Ph.D in applied math/machine learning/data science/imaging science and 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 contacts of at least two references to ronan.fablet@imt-atlantique.fr and rodolphe.devillers@ird.fr. 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€ depending on experience.