

## Thesis Topic: Big Data Analysis and Visualization of Marine Life Behaviour from Open-Source Datasets

Apply data science techniques to analyze marine life. Turn complex data into visualizations that everyone will understand.

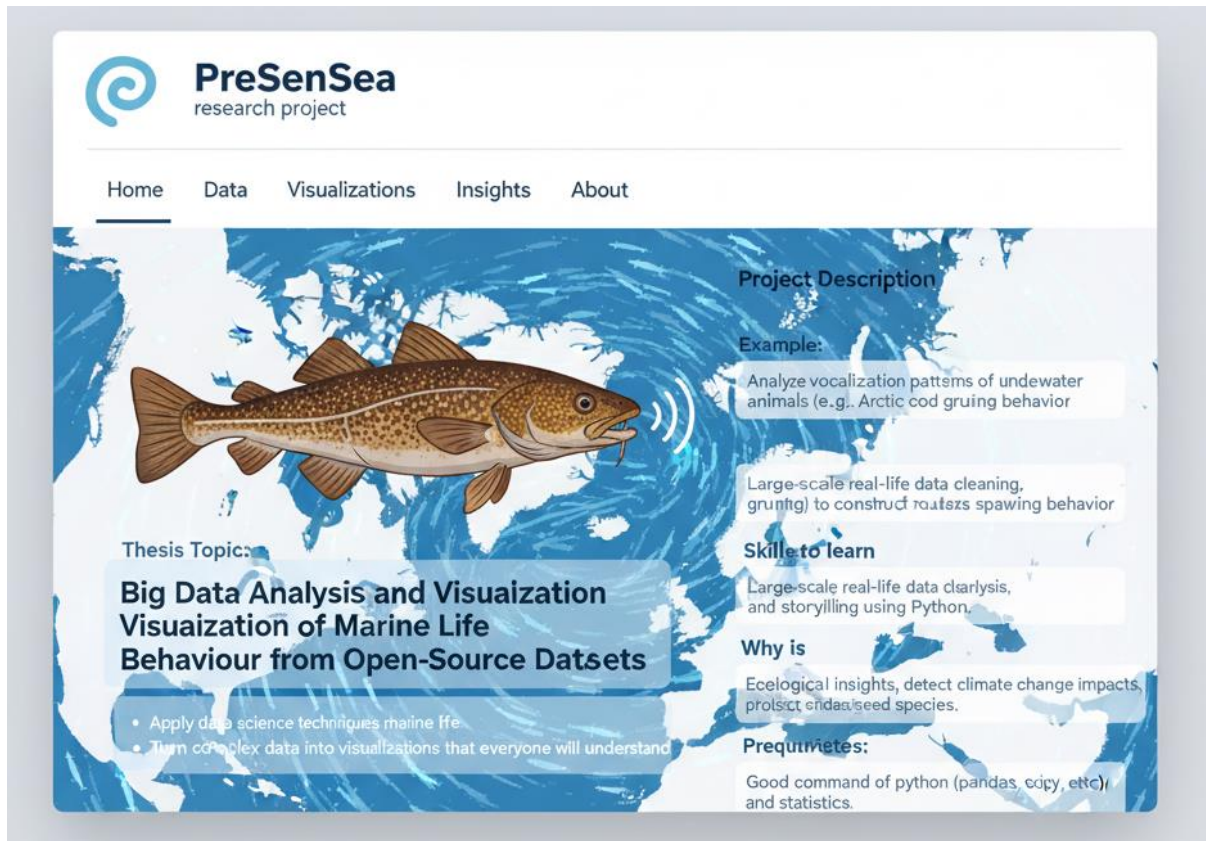


Figure 1. AI generated Web interface illustration

For example, we can try to find vocalization patterns of various underwater animals in open acoustic data (e.g., the grunting of Arctic cod or herring) and construct possible routes they may have taken or analyze their spawning behaviour.

**Skills to learn:** large-scale real-life data cleaning, analysis, and storytelling using Python

**Why is it important?** This is a project that can lead to significant ecological insights. Your analysis could help detect climate change impacts, protect endangered species, or reveal behaviors we've never seen before. Pure data science with a purpose!

**Prerequisites:** Good command of python (pandas, scipy, etc) and statistics.

**Supervisor:** Dubrovinskaya Elizaveta