



IDP: AI/ML-based Vessel Tracking System

Would you be able to find your way back after a pub-crawl without using Maps or other GPS-based apps? We don't, and we are not alone... The International Maritime Organization (IMO, governed by the United Nations) lately released an urgent call addressed to research institutes, industry, and politics to find new innovative localization solutions to mitigate the dependance on satellite systems. In view of the urgency, the call was explicitly further directed to new players to enter the maritime market, such as startups and smart inventors.

The problem? Navigation has become increasingly dependent on satellite communication. However, the system is extremely vulnerable to jamming and spoofing attacks from the private sector and, more stringently, hostile states and their governments.

The target? IMO's call was to develop a robust and distributed backup system for the vulnerable satellite navigation.

Our solution? We came up with a low-cost resilient radar-based system perfectly suited to back up satellite navigation and we were able to protect it with two world-wide patent families. We are sure, that catastrophes like the recent collision and sinking of the NATO battleship KNM Helge Ingstad (cost of repairing estimated to be over \$1.4 billion, according to Norway's defense department) and many others could have been avoided with our technology. We just need your help to prove it ;-)

If you'd like to be part of a young dynamic team to develop cutting-edge technologies and prove their readiness for deployment in the different regions of the world, this is your chance!

Your challenge

- Support Covadonga's operation of a new demonstrator on the Oslo Fjord.
- Use our recorded data to identify the ships going to and coming from Oslo in real time.
- We welcome both equally, solo-IDPs and teams. The scope of the task will be adjusted according to your profile.

What we offer

- Insights into cutting-edge technologies.
- Flexible working hours and the possibility to work from home.
- Possibility of an internship or master thesis.
- In case you manage to reliably identify ships, we offer you tickets to visit Norway on board, e.g., of the Color Fantasy (picture).





What we expect

- You have a strong background in AI/ML.
- You have experience with time series analysis.
- You show self-initiative and are not afraid to take responsibility.

Write us an E-mail to florian.schiegg@covadonga.eu or give us a call at +49 (0) 89 171 05868