Interdisciplinary Project (IDP) – Route Planning Tool

Did you know that one single container ship emits more CO$_2$ than 65,000 cars?

At CargoKite we are keen on changing this by developing the sailing ship of the 21st century. Our autonomous, micro container ship is powered only by wind and consists of two key components: a kite to pull the ship and our unique, patent pending ship design.

A tailored route planning tool is crucial for an efficient vessel operation. We have developed a first version of a smart route planner that calculates the optimal global trajectory for this new ship class and estimates the time of travel taking into account the ship’s dynamics and wind forecasts. Against this background we are looking for a motivated student team to further expand the functionality of the route planning tool. You will be working independently, realize your own creative ideas and take over full responsibility for the enhancement of the tool.

Your tasks
- Familiarization with current solution and identification of improvement potential
- Requirements elicitation in coordination with the founding team
- Development of a machine learning model for precise prediction of arrival time
- Extension of the existing tool by additional constraints, such as tides, traffic rules etc.
- Evaluation of suitable machine learning methods to optimize the ETA estimations

Your profile
- Individuals or a team of 2–5 students enrolled in Informatics (M.Sc. TUM)
- Experience in programming: Python, ideally also Javascript
- Interest and experience in developing machine learning models
- Motivated, independent and solution-oriented work approach

What we offer
- Possibility to make a real impact whilst working on cutting edge technology
- Personal development through a high level of independency and responsibility
- Become an early team member of CargoKite and experience the growth of an early stage, high-tech startup with flat hierarchies
- Possibility to join the team full-time after successfully finishing your degree
- Workspace in our office with access to snacks and coffee

Interested? Get in touch!

Contact: tim@cargokite.com | Visit our website: www.cargokite.com

Not quite your topic? Get in touch anyway and we'll explore other potential options together!

At CargoKite, we believe that diversity and equal opportunity are key to success. Therefore, we create an inclusive environment for all employees and are open to diverse applications, regardless of age, skin color, national origin, religion, gender, sexual orientation or other legally protected characteristics.