

About MAHI

At MAHI we are pioneering the next generation of maritime autonomous navigation technology and growing fast.

MAHI builds maritime autonomy for surface vessels. Our hardware enabled software pairs the MAHI Sense marine grade edge computer with the MAHI Bridge operator tools to deliver camera led situational awareness, remote supervision, and collision avoiding local path planning that works even without connectivity. Founded in 2022 and based in Mechelen, Flanders, MAHI grew out of Project Mahi (started in 2015), the team behind Mahi-2, the first autonomous solar vessel to cross the Atlantic in 2021–2022. Today our systems are integrated on new builds and retrofits from 6 to 60 meters, and have been exercised with partners such as Seasats in the US Navy's Task Force 59 Digital Horizon program.

If you're ready to provide value and truly make a difference, MAHI is the place to be. You will work as part of a tight knit team of 10, incl. our cofounders:

Andreas Belderbos: COO who keeps operations smooth from contracts to sea trials.

Quinten Lauwers: CPO who sweats the details and ships features that matter.

<u>Pieter Jan Note</u>: CEO who keeps the vision clear and the pace smart.

Bertold Van den Bergh: CTO who makes hardware and software play nice at sea.

How we work

We optimize for doing. We ship, learn, and improve in short loops. Ownership over ego. Practical impact over slide decks. Clear communication, fast decisions, and respect for the craft.









Your role

Join MAHI to work at the cutting edge of AI for autonomy. As an AI Perception Software Engineer you will design and deliver models and systems that allow our vessels to understand the world in real time. You will work with advanced AI models including multi headed neural networks and you will push performance on hardware with finite resources. You will also develop anomaly detection approaches that improve the safety and efficiency of maritime autonomous systems.

What you will do

- Design, implement, and improve AI and ML algorithms for object detection and identification, classification, pose estimation and weather identification
- Develop and train deep learning models using real world and digital twin data to handle glare, rain, fog, waves and low light
- Optimize and compress models for edge deployment with quantization, pruning, distillation and graph optimization
- Build robust data and training pipelines, including dataset curation, augmentation and evaluation with clear acceptance metrics
- Integrate perception modules into our autonomy stack and collaborate closely with R&D, field engineering, and integration and test teams to ship high quality software
- Instrument models and services for observability, performance and safety monitoring in production
- Contribute to coding standards, code reviews and technical documentation

What you need to succeed

- At least 2-3 years experience in computer vision model architecture design
- Strong programming skills in Python, Go, or C or C++
- Practical experience with deep learning frameworks such as PyTorch, TensorRT,
 TensorFlow, Keras or ONNX Runtime
- Solid grasp of computer vision and ML fundamentals, from data pipelines and training to evaluation and error analysis
- Ability to reason about edge hardware limits and make smart trade offs between accuracy, latency and energy use
- Fluency in English and clear, concise communication



Bonus points

- Experience with Linux based operating systems
- Knowledge of cloud platforms such as AWS or GCP
- Proficiency with Docker, Git, Yocto, and MLOps tools such as MLflow or DVC
- Experience with sensors such as cameras, radars, and lidars and techniques for sensor fusion
- Understanding of camera processing and video pipelines with GStreamer and OpenCV
- Familiarity with robotics frameworks such as ROS 2 and with embedded or edge platforms such as NVIDIA Jetson or ARM based devices
- Comfort with simulation and digital twins for data generation and validation

What's in it for you?

- A fun, fast-growing, and internationally active company
- Learning opportunities from experienced colleagues
- Competitive salary, fringe benefits and possibility for stock options

Application

Ready to join the MAHI team?

Please submit your application through the form on our website.

Thank you for considering MAHI as your next adventure!