

Vacancy: Software engineer - AI perception



About MAHI

MAHI is a startup company working on the next generation of maritime autonomous navigation technology. We are rapidly growing thanks to our recent business successes.

Our philosophy is to exceed our customer's expectations by delivering high-quality products (both hardware and software) and excellent customer support. We are building this reputation project by project. We take great pride in getting the job done right and on time and our customer testimonials speak for themselves (<https://mahi.be/use-cases/>).

We are a group of tech enthusiasts, software developers, tinkerers (the founders all have 3D printers at home) and business people. MAHI is offering a fun environment for people who want to genuinely provide value and make a difference for our customers.

We are located in the beautiful city of Mechelen at walking distance from the train station. Mechelen is at the heart of Flanders and at the crossroads of Antwerp-Brussels and Leuven-Gent.

Role

Software engineer-AI perception

Salary range

€4500-€6500 gross salary per month + fringe benefits + possibility for stock options

Main responsibilities (R&D team)

- Design, implement, improve, test and deploy AI & ML algorithms and deep neural network architectures for object identification & classification, object pose and distance estimation and weather identification
- Train deep learning models using real and digital twin data to achieve robust perception in challenging conditions, such as poor lighting/dark and different weather situations (rain, fog, snow)
- Evaluate potential perception solutions and make design trade-offs and decisions based on customer requirements
- Develop and use modern software engineering techniques to implement high-quality, well-tested software
- Join the R&D team and work with field engineering team and Integration and Test team to evaluate, deploy and continuously improve your software
- Engineer and ship high-quality, reliable software that will be deployed to operational vessels

Skills

Requirements

- Good proficiency in one or several of the following programming languages:
 - Python
 - Golang
 - C++/C
- Training AI & ML models
- Proficiency in any of the following AI frameworks:
 - PyTorch
 - TensorRT
 - TensorFlow
 - Keras
 - ...
- AI for deployment on embedded systems such as Nvidia Jetson
- Interest & ability to quickly learn new technologies
- Fluent in English

Bonus points

- A Master's degree or PhD in Computer Science, Computer Engineering or similar
- Experienced in Linux-based OS
- Knowledge of cloud platforms (AWS or GCP)
- Knowledge of Docker, Git, Yocto, MLOps
- Experience with sensors like cameras, radars, lidars
- Knowledge of the pipeline of camera processing with Gstreamer
- Fluent in Dutch

Details

MAHI is looking for a capable software developer to join our software development team to develop state-of-the-art AI & ML algorithms related to vessel perception and control systems. You'll be working closely with our co-founder Quinten Lauwers. You can read below why Quinten enjoys working at MAHI:



“At MAHI, I get the chance to work with some of the most capable and nicest people I’ve ever met. Together, we tackle fascinating problems in the marine autonomy space. The job strikes a great balance between research, creative thinking, freedom and pragmatism where the solutions that you create actually get integrated into operational systems. This makes it a very rewarding job as the results of our work are very tangible. Finally, the job is in a start-up company that offers diverse growth opportunities. I would recommend a job at MAHI to all of my friends.”

What we look for:

- Team player
- Take charge attitude
- Pragmatic
- Customer-oriented (both internal and external)
- Driven to deliver a high-quality product

What you can expect from us:

- A fun work environment in a fast-growing and internationally active company
- Great learning opportunities from experienced colleagues who are committed to integrating new team members
- The opportunity-of-a-lifetime to make a mark on the safety and efficiency of maritime autonomous systems
- Competitive salary and fringe benefits:
 - Meal vouchers
 - Hospitalisation insurance
 - Public transport plan
 - Laptop
 - Internet at home
 - Phone with plan
 - Possibility to work-from-home
- Flexible hours: we look at results, not hours

Application

Please reach out to jobs@mahi.be with the following:

- Confirmation that you are willing to work onsite in Mechelen, Belgium
- Link to your GitHub or personal website (if you have one).
- A 1-2 sentence or less reply to each of the following questions (schematics allowed):
 - Describe the general architecture of a custom AI/ML model you've implemented (note it doesn't need to have been a success).
 - Was the design inspired by an existing model?
 - Roughly how much data did you train it on?
 - Roughly how long did you train it for?
- A resume/CV.
- A few sentences explaining where you heard about us and what you'd hope for in this job.
- Possible starting date (or range).

We'll review your application and invite you for a conversation if we feel there could be a fit!

We appreciate diverse perspectives and life experiences and so encourage people of all backgrounds to apply.

Thanks for checking us out!