



Space Applications Services – Internship - Sensor Data Processing and AI/ML

Internship Position

In the context of several ongoing data fusion and radar image processing projects, data gathering, preparation and creating related machine learning models is deemed essential for improving the detection of objects of interest.

The successful intern will contribute to collecting, processing, and analyzing specialized radar image data, as well as supporting the automatic detection of objects in such signals. This internship will allow the intern to gain valuable experience in sensor data processing and artificial intelligence and can be organized to fulfill the requirements of a Master Thesis.

- **Location:** Sint-Stevens-Woluwe (Brussels Area)
- **Duration:** 6 months
- **Start date:** As of October 2026

Tasks and Responsibilities

- Improve the existing data processing and machine learning pipelines with new datasets and modelling approaches.
- Gather data using a specialized radar sensor across various scenarios, such as placing objects of interest at different positions to build diverse datasets.
- Analyse and perform annotations of the object signature patterns in the radar image datasets to estimate the distance and radius of the targets.
- Support the improvement of the deep learning models for radar image signals and object patterns.
- Perform distance and size estimation experiments for the target objects embedded in different mediums.
- Assist the integration and performance evaluation of detection models in real-world applications.
- Document and report the findings of data analysis and model performance to the research team.

Skills and Experience

- Currently enrolled in a Master's degree in Robotics, Electronics, Computer Science, Data Science or a similar University program
- Basic knowledge and understanding of:
 - Python programming in Ubuntu, C++ is nice to know
 - ROS framework
 - ML libraries (e.g., PyTorch, TensorFlow)
 - Deep learning fundamentals and object detection techniques

Considered as Assets

- Hands-on experience with 2D (Radar) image processing systems or other distance sensing sensors
- Experience with deep learning model training and deployment
- Previous work in sensor data labeling or analysis
- Ability to document and communicate technical findings clearly

Our Offer

- An experience within a growing company with highly motivated Engineers, Scientists and Administrative Staff coming from all different horizons and countries
- A professional and multicultural working atmosphere
- A client exposure and networking opportunities
- A full-time Internship with a monthly lump sum allowance, under certain conditions.