



MASTER'S THESIS PROJECT AT PANDIONAI: IMPLEMENTATION OF CYBERSECURITY-AWARE SATELLITE SIGNALS APPLIED TO EARTH OBSERVATION

Are you passionate about space, cybersecurity, and signal processing?

We invite you to embark on an exciting journey with PandionAI for your Master's Thesis, where you'll be at the forefront of enhancing our satellite platform AlertSat cybersecurity to ensure its trustworthiness, reliability and integrity.

Project Overview

In this innovative project, you will take on a pivotal role in integrating cybersecurity best practices into communication between satellites and ground stations. Your responsibilities will encompass the development of a cutting-edge simulator designed to encode and encrypt signals originating from an edge computing device. These secured signals will then be transmitted to a simulated ground station, ensuring that robust cybersecurity measures are in place.

Job Type: Master Thesis / Internship

Location: Kista (Stockholm), with the flexibility of hybrid remote work

Scope of Project

- Innovate and build a communication emulator for encoding and encrypting vital signals between ground stations and satellites.
- Configure an edge computing device to facilitate the secure transmission and reception of signals.
- Contribute to comprehensive test campaign planning, ensuring the effectiveness of your proposals.
- Collaborate with external ground station providers to validate the feasibility and practicality of your approach.
- Engage in communication with cybersecurity experts to benchmark and ensure adherence to cybersecurity best practices.

About PandionAI

PandionAI, established in 2019, is an innovative start-up company in the space industry, specializing in Earth Observation, with a strong focus on downstream applications and AI/IT development. We are seeking passionate individuals to join us on our journey to put the AlertSat satellite constellation in space and to contribute to shaping the development of AlertSat's services in close collaboration with our dynamic team.

At PandionAI, our mission is to secure time-critical intelligence through AI-based analysis from our AlertSat satellite constellation. We are currently working on a system that utilizes image recognition for event detection directly on board the satellites, enabling real-time information delivery. Our ultimate goal is to bridge the gap between satellite data collection and end users, resulting in enhanced safety, transparent information dissemination, and rapid response to events happening on Earth's surface. We empower our users with the ability to make informed decisions in the face of rapid changes and critical events.

Interested? Send your CV and some description of why your interest in this project is of extra-large interest to PandionAI to career@pandionai.com.