## Stage voor de opleiding Master Informatica

## Titel: Advanced Insights for Industrial Processes

Gegevens bedrijf: Naam: Agidens Tel: +32 3 641 17 70 Contactpersoon: Ruben Broekx mailadres: ruben.broekx@agidens.com Adres waar de student zal werken: Baarbeek 1, 2070 Zwijndrecht

Kort (min 90 uur) of lang (180 uur): lang

Korte beschrijving van de opdracht:

Problem description: Agidens currently utilizes a platform capable of performing basic data-driven analyses on client process information. While useful, there remains a significant untapped potential in applying more sophisticated machine learning models to this data, particularly in an unsupervised and semi-supervised learning context. Our goal is to extract deeper, actionable insights from complex time series data collected from industrial processes.

Proposed solution: The project will apply advanced machine learning techniques to enhance our existing platform. The intern will develop an "Al Insights Assistant" to perform "alarm cascade analysis," identifying sequences of alarms from various datasets to predict potential issues. This assistant will utilize heavier, unsupervised, or semi-supervised models to uncover patterns and anomalies beyond our current capabilities.

## Technologieën die aan bod zullen komen:

We are seeking candidates who are eager to contribute to pioneering AI solutions. Ideal applicants bring the following skills and experiences:

- Currently enrolled in the 3rd year of a bachelor's program or in a master's degree in computer science, physics, mathematics, or a related field
- Strong proficiency in Python
- Excellent verbal and written communication skills in English
- Experience with deep learning libraries such a PyTorch is a plus
- Familiarity with cloud deployment is a plus
- A basic understanding of industrial processes is a plus



Faculteit Ingenieurswetenschappen en Architectuur Opleiding Industrieel Ingenieur Informatica Campus Schoonmeersen, Valentin Vaerwyckweg 1, B-9000 Gent