

## Stage weken voor de opleiding Master Informatica

Titel: Algorithms for scheduling

Gegevens bedrijf:

Naam: ARDIS Information Systems NV

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Adres waar de student zal werken: Brugstraat 75, 9880 Aalter

Korte of lange stage: **4 weken / 6 weken**

Korte beschrijving van de opdracht:

ARDIS® is the machine independent global market leader for optimization & manufacturing software. Our cutting-edge software offers a modular all-in-one platform specifically designed and built for the sheet/bar/coil cutting industry.

The student will become part of our R&D team to work on our rapidly growing MES solution. The ARDIS R&D team is a passionate team with a broad mix of talents and skills, supporting personal growth and ambition.

To allow scheduling the upcoming work in the various work cells on the shopfloor, algorithms are used for translation of the various tasks into plannable blocks on a scheduler. For the sake of simplicity, the current planning algorithms are not applicable for all cases due to some internal constraints. **The goals of this internship is to investigate approaches and alternative implementations that allow scheduling more real world cases.** This includes for example coverage for rush orders, parallelization of activities to reduce the total duration and splitting and merging processing flows when not all parts have to undergo the same operations.

Technologieën die aan bod zullen komen:

Following technologies and skills could be touched:

- Functional analysis
- Technical analysis
- .NET
- Javascript
- C#
- SQL