

Stage weken voor de opleiding Master Informatica

Titel: MISPL Optimizer

Gegevens bedrijf:

Naam: MIPS

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<https://www.youtube.com/watch?v=tPpSNeDwPkk>

Korte of lange stage: **4 – 6 weken**

Korte beschrijving van de opdracht:

- MIPS develops the GLIMS software product to automate the complete workflow of clinical laboratories. As each laboratory has its own ways of working, GLIMS needs to be very flexible to support all different scenarios. Next to an extensive amount of configuration options, MIPS also introduced a set of hooks where the laboratory can specify their own needs in a simple programming language called MISPL (cfr. VB in Excel).
- MISPL is an acronym for the MIPS Site Programming Language, available to the users on-site. Programs written in MISPL are maintained by site personnel.
- It is a very flexible and powerful tool, allowing laboratories to customize their work environment. Typical usage is:
 - Definition of rules (e.g. if condition a and b are satisfied, then trigger action c)
 - Application customization (layout, numbering of documents...)
 - Labels and reports
 - Browser filters
 - Query include criteria
 - ...

Challenge

- The site personnel maintaining this MISPL code typically has no or a limited IT background.
- Very often, these MISPL's are written very inefficiently, causing performance degradation of some parts of the program.
- The goal of this internship is to write a MISPL code optimizer to detect inefficient constructs in the MISPL source code and optimize them (e.g. elimination of common subexpressions)

Development language

Free to choose, as long as it can be called from within the Progress OpenEdge ABL

The MISPL virtual machine also has room for optimization. Once the source code is optimized, and time would be left, profiling can happen on the engine, and optimized where possible.

DATUM

Fout!

PAGINA

2/2

ONS KENMERK

Fout! Verwijzingsbron niet gevonden.

Internally, MISPL is developed with a combination Flex and GNU Bison (the successors of lex and yacc), C-code and Progress OpenEdge ABL code.

Technologieën die aan bod zullen komen:

