Improve software infrastructure availability and efficiency

ASML

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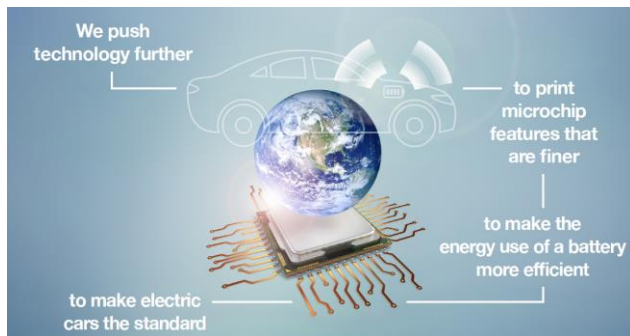
Background information

Within ASML the sector Development & Engineering is responsible for the specification and the design of ASML products.

In this sector, the department SW DE EUV Source Test and Integration specifies, executes and controls the testing and integration of the various software sub-systems into a software release. The T&I department relies heavily on automation for testing and integration.

Your assignment

You will contribute to efficiency of the automated test infrastructure and extending functionality.

The test-infrastructure is in use 24/7 for multiple sites, so for any implementation work you will also participate in the processes (impact analysis, software-design, implementation and review) that ensures quality and avoids downtime on the test-infrastructure itself.

Possible tasks during the internship (actual content depends on internship duration and start-date):

- Add controls to avoid running a test multiple times
- Re-try of previously failed tests only after analysis
- Automated analysis of test-results to offload manual test-analysts
- Avoid running on expensive test-infrastructure when basic (static) tests have not executed yet
- Improve test-scheduler interface to avoid scheduling of tests on inappropriate platforms

Your profile

You are a bachelor or master student in computer science or a related discipline. You have experience with object-oriented programming and know how to use Python, PHP, Javascript and HTML. You are interested in (automated) testing, quality (coding style, warning free compilation) and standardization (software re-use and maintainability).

This is a graduation internship for 4 to 5 days a week with duration of a minimum 5 months.

Please keep in mind that we can only consider students (who are enrolled at a school during the whole internship period) for our internships and graduation assignments.

What ASML offers

Your internship will be in one of the leading Dutch corporations, gaining valuable experience in a highly dynamic environment. You will receive a monthly internship allowance of 500 euro (maximum), plus a possible housing or travel allowance. In addition, you'll get expert, practical guidance and the chance to work in and experience a dynamic, innovative team environment.

ASML: Be part of progress

We make machines that make chips – the hearts of the devices that keep us informed, entertained and safe; that improve our quality of life and help to tackle the world's toughest problems.

We build some of the most amazing machines that you will ever see, and the software to run them. Never satisfied, we measure our performance in units that begin with pico or nano.

We believe we can always do better. We believe the winning idea can come from anyone. We love what we do – not because it's easy, but because it's hard.

Students: Getting ready for real-world R&D

Pushing technology further is teamwork, and our R&D team is more than 5,500 people strong, with major sites on three continents. Dozens of diverse, interdisciplinary teams work in parallel to meet a challenging development schedule.

In such an environment, your colleagues may be sitting next door, or they could be thousands of kilometers away in a different country, or even working for a different company.

An internship at ASML is your opportunity to get to know this world of industrial-strength R&D and get a feel for that excites you most. Will you design a part of the machine, or make sure it gets built to the tightest possible specifications? Will you write software that drives the system to its best performance, or work side-by-side with the engineers of our customers in a fab, optimizing a system to the requirements of the customer?

How will you be part of progress?

Field: Computer Science, Automated testing
Contact: internships@asml.com
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www.workingatasml.com/students