Investigating the applicability of cutting edge techniques within IT & Data

ASML
Be part of progress

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.
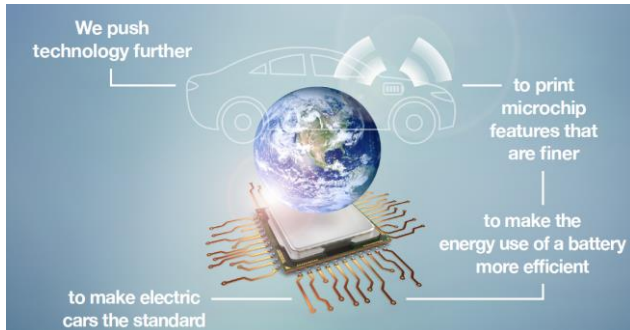
Background information

Within ASML, the Competence Center Product within IT is responsible for all tools and infrastructure that is required for product Development and Engineering. A specific group in this competence center is responsible for everything related to Software Development, this group is called Software Engineering Infrastructure (SEI), where more than 100 people are working in. One of the services they provide is an infrastructure to run the tests of many end-product related software deliverables. Those tests are done both manually and automated, and need to be executed before the software is deployed to a real machine in the actual cleanrooms.

This test farm is built with modern virtualization techniques, and offers capacity to run 1000's of tests a day. It is designed and maintained by a small team within SEI. To make the systems ready for ASML's future growth the SEI group collaborates with Development & Engineering.

Your assignment

Our test farm generates a huge amount of test reporting and system logging during its operation.

We are looking for patterns, trends, cause-effect pairs etc. in this set of data, enabling us to improve the utilization of the test farm, and improve the quality of the entire testing process.

The assignment involves at least the following tasks:

- Identify the potential value in the immense set of information mentioned above.
- Make sure that data is captured, without disrupting the throughput of the test farm.
- Harvest a piece of the value out of the above mentioned set of data, using modern artificial intelligence techniques such as Watson (IBM) or potentially open source equivalent functionality, or a combination.
- Advice on next steps to be taken in this journey.

Your profile

You are a bachelor or master student within the field of IT, Data Science, Artificial Intelligence or related and you are looking for an apprentice internship starting as soon as possible, for a minimum duration of 5 months. You consider yourself self-propelling and additionally, you have a natural curiosity for the topics discussed above.

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 from anyone. We love what they 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: Information Technology, Data Science, Artificial Intelligence
Contact: internships@asml.com
Telephone: +31 (0)40 268 6773

www.workingatasml.com/students