Background information
To make the complex machines of ASML perform at the precision scale that they do, both hardware and software design need to perform at their very best.
One of the challenges of (embedded) software consists of creating applications that perform desired functionalities while minimizing lead time. A technique to minimize lead time is concurrent engineering: we start developing software and hardware in parallel having hardware simulators as enablers.
Hardware simulators are developed by functional engineers with the purpose of early validation of functional designs but they can be re-used by software engineers to validate software in early design phases and reduce software development cycle time.

Your assignment
Some of the hardware simulators use Simulink models. In order to be used for validation, these Simulink models must be embedded in the same environment as our evolving software and for that, the interface between the simulator and the software must be defined.
The scope of your assignment is to create an Interface Definition Language (IDL) to define interfaces between simulators and ASML software. You will validate your solution by deploying existing simulators in the existing ASML’s software environment, and by using them to validate functional software requirements.

Your profile
You are an electrical engineering or computer science master student with knowledge of Simulink and or C/C++. Knowledge of the eclipse modelling framework is a nice to have

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 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: Electrical Engineering/Computer Science
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