MASTER THESES WEB PLATFORM

Contents

Building the next generation Cloud Computing Platform for Modelling and Simulation

Modelon is building a new cloud-based system modeling and simulation platform of the future – [Modelon Impact](). The solution needs highly interactive user interface for system modeling, massive parallelization of numerical simulations in the cloud, post processing of large data sets and visualization in 2D and 3D. Collaborative system design preferred by modern engineers is a key capability of the platform, as well as high standards for IT security to keep sensitive customer product data safe.

As a master's thesis student, you will work in our cloud platform development team, together with our experts and developers. You will also gain experiences with agile software development practices, including Scrum, code review and pair programming, all of which are key elements of Modelon's software development process.

Master's thesis topics:

- Massive parallelization of simulations with AWS
- 3D visualization of vehicle system simulation
- Database systems to store huge data sets from massive parallelization
- Advanced visualization methods

Student profile: Skilled and highly motivated student(s) with interest in cloud computing, numerical algorithms and/or UI programming. Prior knowledge of Python, JavaScript and 3D applications is considered a merit.

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