



The Ypsomed Group is a leading developer and manufacturer of injection and infusion systems for self-medication and a renowned diabetes specialist with over 30 years' experience. Ypsomed has its headquarters in Burgdorf, Switzerland, and operates a global network of manufacturing sites, subsidiaries and distributors. The Ypsomed Group employs around 1800 employees.

The Algorithms Team of Product Development Hardware & Software is searching for a committed student for an internship (6 months) or a master project.

Background: Participation in a project to develop and optimize an inductive position sensor in the medical technology environment. Simulation, modeling and optimization of the inductive position sensor for the detection of spring positions.

Internship

Your main tasks

- Simulation of the inductive sensor for different spring configurations and spring positions
- Simulations using a FE program (commercial software, open source software or student software)
- Influence of the design geometry on the mechanical properties of the spring (contact surface of spring coils, contact pressure, deformation)
- Influence of the simulated mechanical properties on the inductive signal of the spring and sensor
- Coupled simulation of the influence of design parameters and process parameters on the stability of the inductive signal
- Testing the simulated and optimized parameters on newly produced springs
- Research on spring production and construction

Your profile

- BSc or MSc student in mechanical engineering, electrical engineering, physics or similar
- Interests in FEM modeling (electromagnetic and / or mechanical simulations)
- Knowledge of experimental data analysis
- Interests in sensor development
- Interests in combining different technical fields

We are looking forward to receiving your online application with details of availability (period of notice) and salary expectations.