HITACHI
Inspire the Next

Internship: Mechanical and system simulations (f/m/d)

At Hitachi Energy our purpose is advancing a sustainable energy future for all. We bring power to our homes, schools, hospitals and factories. Join us and work with fantastic people, while learning and developing yourself on projects that have a real impact to our communities and society. Bring your passion, bring your energy, and be part of a global team that appreciates a simple truth: Diversity + Collaboration = Great Innovation

Hitachi Energy, formerly ABB Power Grids, is a world leader in the technology for transmission and distribution of electricity and employs 38,000 experts in more than 90 countries. The company has a long tradition in providing internship training for students from all over the world. Our interns will be part of a motivating and international environment, working with professionals with a wide range of experience and competencies.

For business unit High Voltage Products in Zurich-Oerlikon, we are looking for an intern in interrupter development team. We are looking for an intern to contribute to the simulation team of our Research Center. Objective of the internship is to carry out mechanical and system simulations to evaluate the performances of circuit breakers as well as test data analysis and their utilization in the simulations.

The studies will be carried out with the Dymola software and with in-house software library dedicated to system modeling and simulation of the circuit breakers. The scope of the internship will be also focused on the mechanical multibody (kinematic) analysis including finite element method.

By interacting with experienced engineers and scientists, the intern will acquire basic knowledge regarding product technologies and become an active contributor to the relevant simulation activities.

Our flexible work practices help you optimize personal and business performance while creating an environment where all employees can develop their skills and grow.

Your responsibilities

System simulations of the circuit breakers using Dymola
Pre and post processing for simulations model and results
Finite element analysis of the components of circuit breakers
Data post-processing and analysis using Python

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Your background

Student (preferably Master-level) in Physics, Mechanical or Electrical Engineering, or a related field
Basic knowledge of simulations associated with mechanical and electrical engineering applications
Basic knowledge of mechanics and material strength (practical skills in ABAQUS or similar finite element code is advantageous)
Above average proficiency and interest in programming in Python
Knowledge and practical skills of Modelica language and Dymola are advantageous
Practical skills in Python GUI programming are advantageous
Fluency in written and spoken English
Ability to work in a team, as well as willingness to handle responsibilities independently

More about us

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We serve customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. We are advancing the world's energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 38,000 people in 90 countries and generate business volumes of approximately $10 billion USD. www.hitachienergy.com

Interested in joining our team? If so, we look forward to receiving your full application (motivation letter, CV, references) only via our online careers tool.

Hitachi Energy Switzerland Ltd.
Sonia Granizo
Talent Acquisition

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