

Internship Position – Big Leap

About Us

Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to doing business right, operating sustainably, and helping our customers manage power – today and well into the future. By capitalising on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy and helping to solve the world's most urgent power management challenges. Eaton was founded in 1911 and recently celebrated its 100th anniversary on the New York Stock Exchange. In 2023, we generated \$23.2 billion in sales and served customers in more than 160 countries.

About the Role

One of our major ongoing initiatives is centred around the circularity of energy storage systems. In this project, we aim to extend the life cycle of batteries by repurposing second-life batteries for stationary energy applications, contributing to a more sustainable future and advancing energy storage technologies.

Our local team is developing a 500 kWh behind the meter battery system that is liquid-cooled, and we are looking for a motivated intern to help us innovate in the field of thermal management. The aim is to develop a system that combines the battery cooling process with the building's heating system for maximum energy efficiency and sustainability.

What you'll do

- Develop and model a thermal management system that integrates liquid-cooled batteries with the building's heating system.
- Design, test, and validate the combined system to ensure optimized performance, energy efficiency, and safety.
- Collaborate with cross-functional teams including R&D, building management, and engineering to refine system designs.
- Conduct thermal simulations and analyses to evaluate system performance under various conditions.
- Explore and implement advanced control strategies for balancing battery cooling needs with building heating demands.
- Create technical documentation and present findings to the team.

Requirements

- Master's degree in Mechanical Engineering, Electrical Engineering, Energy Systems, or a related field.

- Strong understanding of thermal management systems and heat transfer principles.
- Familiarity with battery energy storage systems, particularly liquid-cooled batteries, is a plus.
- Experience or coursework related to HVAC systems or building energy management is an advantage.
- Proficiency in CAD software and thermal simulation tools (e.g., MATLAB, Simulink, COMSOL, or similar).
- Ability to work independently and within a team environment.
- Strong problem-solving skills, attention to detail, and an innovative mindset.

What do we offer

- Hands-on experience working on a cutting-edge energy application with a real-world impact.
- Mentorship from experienced engineers and professionals in the field.
- Exposure to multidisciplinary projects combining energy storage, thermal management, and building systems.
- Competitive compensation and benefits package
- Flexible working solutions
- Excellent working environment – safety and ethics are important for us
- Culture & Values – we are more than the products we invent and produce – the way we do business is just as important. At Eaton, our values and culture define who we are – both individually and as an organization – and direct our activities every day
- Learning & Development - we invest in our employees for the long term – not just with salary and benefits, but with ongoing learning and development opportunities, made available through Eaton University