



Model Predictive Controls Specialist (m/f/d)

Berlin, remote

About us

Thermosphr is the most exciting GreenTech / PropTech startups in Europe, backed by top European VC's, now closing a new financing round.

We are tackling the HVAC (heating, ventilation, air conditioning) market, which represents over 10% of the world CO2 emissions.

Our mission is to make commercial buildings energy efficient and sustainable. We help real estate players to reduce their CO2 footprint by integrating our cutting-edge HVAC (heating, ventilation, air conditioning) optimization software. We make ESG more than vain words with tangible results in GWh and tons of CO2 saved.

Thermosphr has developed a unique thermal digital twin technology for real estate that saves over 30% on the energy dedicated to HVAC by controlling equipment remotely and in real time.

We care about what we do and will do whatever it takes to have a positive impact on the planet by continuously developing the smartest innovations.

We believe in people and relationships more than prescribed processes as we think that is what it takes for our team and business to thrive. We have each others' backs and encourage each individual to build their own path regardless of their position or their seniority.

We strive for greatness, raise the roof not the floor!

Start-up life is always an adventure, you can expect this one to be a unique opportunity to make a real difference, while being part of a fast-paced, ambitious, and inspiring team. We're looking for hands-on candidates motivated to have a positive impact on the world, and willing to grow a team of like-minded individuals around them.

What you'll do

In order to support our growth plans, we are currently looking for a MPC Specialist (m/f/d) to join us.

We have developed a plug-and-play SaaS with advanced built-in automation to control heating and cooling and ambition to deploy it in thousands of properties worldwide.

As MPC Specialist, you will work in close collaboration with our CTO and thermal and controls engineers to build state-of-the art controller for our SaaS solution. In particular, you will:

- Design and develop state-of-the-art model predictive control of megawatt-scale heating and cooling systems in large commercial buildings,
- Deploy robust and fault-resistant controller that operates with minimal downtime in real world (and real time) applications where measurements are noisy and unpredictable disturbances,
- Assist in the development of tools for rapid system identification and state estimation of thermal and electro-mechanical systems,
- Keep yourself abreast of the latest developments and research in advanced controls such as reinforcement learning and optimal control of neural ordinary differential equations,
- Be the go to person in the company in all controls matters

What you bring

- Bachelor's degree or Master's degree in mechanical, electrical, energy engineering, or other relevant field,
- 3+ years of relevant experience in research or real-world application environment
- Strong willingness to develop a efficient, robust and concrete solutions to a complex product in timely manner,
- Experience in developing Model Predictive Control (MPC) for continuous dynamic systems is a must,
- Intermediate Python skills and experience with scientific modules (such as Numpy, Scipy, Pandas),
- Advanced Knowledge of Moving Horizon Estimator (MHE) is preferred,
- Basic knowledge of HVAC is highly desirable,
- Impeccable English communication skills

What we offer

Fair question in a competitive market for the best talents!

We're all on a mission that involves boundless curiosity and unlimited learnings, tackling challenges and making a difference, thinking out of the box and making things happen. Ultimately, we all have the same job description: make Thermosphr successful.

We bring you on a unique journey together with the great people determined to make the world better. Our product is exceptional, and it will change long established standards in the way real estate deals with both technology and the environment.

You will work with a diverse team with a wide range of technical backgrounds (thermal modeling, controls theory, building automation, data science...) eager to continuously learn. We value your time and expertise, appreciate your input at all times, and want to keep your skills growing (dedicated individual training budget).

We have you covered financially, for benefits, work flexibility, and having dedicated time for your loved ones, but if those are your only drivers, we may not be the best choice for you.

We're moving fast so apply now if you want to join us!

Please apply to jobs@thermosphr.com including a CV and a few words (2-3 lines max) on why you think you are a good fit for the position.