

JOB DESCRIPTION

Job Title:	Building Performance Modeller
Location:	London or Bristol
Reporting to:	Building Performance Engineer / Head of Sustainability
Working with:	Building Performance Team & Practice Wide H0025
Project:	Zero Carbon

ABOUT THE ROLE

This is an exciting opportunity to take a role in AHMM's growing Sustainability and Building Performance Team, to contribute to our commitment to help tackle the climate and biodiversity emergency and to develop zero carbon buildings.

As a Building Performance Modeller at AHMM the candidate will carry out building performance modelling across a range of metrics to support and inform our developing designs as well as analyse post occupancy evaluation generated data to understand and improve existing building performance.

Key part of the candidate role will be to develop bespoke parametric analysis tools, identify opportunities for optimisation and structures of iterations. They will use their computer-based numerical skills to model building and environmental conditions at different scales. Knowledge of an industry standard energy modelling software is beneficial. The ability to approach a modelling exercise from first principles is essential.

ABOUT US

The AHMM Building Performance Team supports architectural designers to develop detailed and strategic plans for low carbon buildings. The team implements advanced dynamic thermal modelling and life cycle assessments to inform the architectural process since the early-design stages. Part of this role is communicating with our architects, clients and beyond.

The team also carry out and publish independent research and post occupancy evaluation studies of our finished buildings. We are active outside the practice through teaching, advocacy and working with activist groups. A current research project is investigating Net Zero Carbon buildings with UCL and Innovate UK.

Allford Hall Monaghan Morris have ambitious clients throughout the UK and internationally and our research-led, collaborative working method offers a friendly, rewarding and supportive environment for personal and professional development.

Since September 2017 our employees have been majority owners of Allford Hall Monaghan Morris Ltd through the AHMM Employee Ownership Trust.

This position is offered as a full-time, permanent role however we are open to discussing flexible working hours.

RESPONSIBILITIES

- Development of modelling workflows, groups of iterations and optimisation of algorithms.
- Expansion of the current AHMM bespoke parametric tools for performance-driven design.
- Development of conceptual approaches and new methods to follow-up and understand environmental processes in the building environment.
- Building performance modelling using AHMM's bespoke calculation sheets, parametric options appraisal tools and industry standard software (IES VE, Grasshopper, etc.).
- Data mining of design and actual building performance data.
- Input into sustainability and building performance research and development.
- Dissemination of technical knowledge throughout the practice

- Communication with wider industry through graphic, written and verbal communication.

KEY REQUIREMENTS

- A degree or background in a modelling-related field (e.g. Maths, Engineering, Science).
- Quantitative and computer-based numerical skills
- Some knowledge of programming and scripting (e.g., Python, MATLAB, Grasshopper)
- A Demonstrable ability to develop modelling workflows and having knowledge about optimisation modelling
- Expertise in analysing, interpreting, and processing model data (in a spatial and temporal domain)
- Flexible to manage running change and highly organized to meet deadlines
- Proactive, creative, problem-solving, willing to learn new skills
- Excellent written, verbal, and graphic communication skills.
- Ability to work and communicate with a wide range of people.
- Attention to detail.

PREFERRED REQUIREMENTS

- Understanding of environmental processes, architecture and mechanical engineering design.
- Experience with the one or more of the following software: IES VE, Grasshopper (Ladybug, Honeybee, Butterfly, Galapagos, Colibri), TAS, EnergyPlus, Building Design
- Having experience to perform CFD modelling, comfort and overheating assessment, daylight and sunlight, natural ventilation modelling, LCA.
- Knowledge of sustainability and net zero carbon issues facing the UK.
- Familiarity with BREEAM, WELL, LETI, NABERS, Passivhaus standards

HOW TO APPLY

If you are interested in working with us, we are keen to hear from you.

To apply, please send your applications including a CV that tells us how your skills match our requirements to recruitment@ahmm.co.uk.

Do not hesitate to contact us if you have any additional queries at the e-mail address provided above. Please do not forget to demonstrate how you are eligible to work in the UK.