Senior Research Consultant (Product Innovation Team)

Dublin (Ireland or Europe remote)

Reference number #2011

This role will be based in our Dublin office with hybrid, flexible and remote working options available.

The Opportunity

IES is currently seeking a highly motivated and experienced Senior Research Consultant to join the Product Innovation Team. The Researcher will play a critical role in advancing the state of the art of the current software solutions, as well as in producing advanced proof of concepts and prototypes for new products.

Responsibilities:

- Integrate advanced machine learning and AI methods with traditional building physics simulation to enhance the current modelling capabilities both at single building and urban scale.
- Develop and maintain advanced simulation tools and AI/machine learning based models for building and energy systems control
- Investigate new BIM to BEM technologies and produce new software features and prototypes leveraging IES state of the art modelling capabilities.
- Develop methodologies, workflows and algorithms on a variety of topics (e.g model calibration, demand side management, IEQ, occupant comfort, building operations and decarbonisation pathways)
- Analyse and interpret extensive data, and synthesize results into actionable insights to drive energy savings in building operations
- Create and maintain building digital twins using specific ontologies to represent real and virtual assets.
- Collaborate with cross-functional teams, product owners, engineers, data scientists, and other stakeholders, to convert prototypes into new products or new software features
- Conduct autonomous research and be able to familiarise with latest advancements in building physics simulation and new AI techniques.
- Present research findings and recommendations to internal and external audiences
- Collaborate with Universities on research projects
- Mentor and guide junior researchers and support their professional development

The Candidate

We are looking for an experienced Research Consultant or Research Scientist with the following skills and experience:

Essential Skills:

- PhD in Mechanical/Energy or Electrical Engineering

- Or Master's degree in similar topics with 4 years of industry experience
- Or Bachelor's degree in similar topics and 5-6 years of industry experience
- Advanced understanding and knowledge of Building Physics, Thermodynamics and Building Services
- Strong coding skills in Python
- Strong analytical skills, with experience data analysis and data mining
- Excellent written and verbal communication skills, with experience presenting technical information to diverse audiences.

Desirable Skills:

- Understanding and knowledge of machine learning, AI, and optimisation techniques.
- Understanding and knowledge of Energy systems and Network modelling.
- Experience with Cloud development and deployment
- Experience in software development, DevOps, code versioning systems
- Ability to work in an Agile/Scrum setting

The Rewards

In return we offer the chance to work for a dynamic company in an exciting and supportive working environment; we will reward you with a competitive salary; private health care; enhanced family leave; a contributory pension scheme; life insurance, flexible start times and hybrid working options.

To Apply

To apply for the role, please send a covering letter stating the skills you have from the requirements listed above and an up to date CV to careers@iesve.com.

Early application is encouraged and IES reserves the right to close this vacancy early should sufficient applications be received. Please ensure you include the job title and reference number in your application.

The Company

At IES we have been working in Climate Tech for the last 29 years and we consider the fight against Climate Change a moral imperative that drives all our decisions. We value People, Purpose and Innovation. We offer a flexible and supportive working environment and the opportunity to work with a team of friendly, interesting and diverse people from across the globe, who are passionate about what we do.

Our mission is to contribute to conserving the earth's natural resources for future generations by reducing the carbon emissions of the built environment. IES is at the forefront of cutting-edge technology in the Climate Tech sector. Our Virtual Environment (VE) software is already the only tool that allows designers and engineers to simulate the full performance of a buildings. We are now expanding our portfolio with new solutions to tackle the built environment at any scale.

IES' technology is supported by integrated consulting services and today its capabilities are expanding from use on individual buildings, to helping create sustainable communities, cities and countries.

We welcome applications from everyone irrespective of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion and belief, sex and sexual orientation. Individuals are treated on the basis of their relevant merits and abilities.

Information on all candidates being considered for roles within the organisation will be handled in accordance with the provision of the General Data Protection Regulations (as amended from time to time). For more information, please see our Recruitment Privacy Statement.