Applications are invited for a Research Studentship (PhD) to carry out research within the School of Computing and Digital Media at Robert Gordon University, Aberdeen, United Kingdom, under the supervision of Dr Ciprian Zavoianu and his team.

**Duration**
The duration of project will be up to 36 months, commencing in February or October 2020 or at a mutually agreed time.

**Proposed Research**
The proposed research will offer the student the opportunity to study, test and develop new data-driven models of dynamic thermal effects that can be used in the (multi-objective) optimization of operational performance. The real-life application scenarios will deal with the transition towards thermal efficiency in industrial production and the built environment.

The project will pioneer the development of artificial intelligence systems that are able to automate dynamic data-driven thermal optimization in a multitude of real-life problems and will specialize the PhD candidate in fields of research that currently have and will maintain a high demand on the job market: thermal modelling, data science, multi-objective optimization.

This project will be focused mainly on:

- Exploratory data analysis
- Data-driven modelling and visualization
- Multi-objective optimization using dynamic thermal models

**Key Skills**
Applicants should have a very good BSc (Honours) (First or Upper Second class) degree or a Master degree (with Distinction or Merit) in Computing Science or related discipline.

**Desirable requirements**
Applicants should have good personal and communication skills, strong professionalism and integrity, and be capable of working on their own initiative. Knowledge of concepts that can be applied for thermal modelling (in particular) and dynamic regression modelling (in general) is a plus.

**Essential Knowledge and Experience:**
- The project will require the understanding, development and application of data processing and machine learning techniques (e.g., neural networks, support vector machines, genetic programming, etc.).
• Proficiency in high-level programming languages (e.g., Java, Python) is required.

Enquiries can be emailed to Kate Lines at csdm-researchadmin@rgu.ac.uk and will be forwarded to Dr Zavoianu if technical in nature.

**Applications**
Applications should be emailed to Kate Lines at csdm-researchadmin@rgu.ac.uk. The applications should consist of a covering letter or personal statement of interest, and a CV. Further information such as passport details or transcripts may be requested during the short-listing stage. Applicants will be contacted for interview and may be asked to complete a short practical task.