

Engineering Doctorate (EngD) Research Opportunity**Collaboration between the University of Reading and URS Infrastructure & Environment UK Ltd**

Project Title: “Developing new sensing and monitoring techniques for continuous improvement of the built environment”

Based within the Energy Performance and Technology Team at URS in London (negotiable)

Closing Date for Applications: Monday 22 July 2013 at 12 noon.

Data and sensing is central to a number of technologies for sustainable built environments. Data can influence how people behave in buildings. Harnessing the right data and communicating it in efficient ways (which might include social media) could positively influence the behaviour of decision makers and occupants for the advancement of sustainability and energy reduction. In the context of a smart grid, two-way multi layered data flows enable integration between energy generators, consumers and storage/transmission systems, minimising environmental impact and maximising value.

This new research project (EngD) will apply the development of new sensing and data analysis technologies. Depending on the specific application (building energy monitoring, smart grid etc) chosen by the team, the research would involve real time energy and activity monitoring using advanced analysis, wireless meters and sensors to underpin the people-centred approach to energy management, or demand-side management considerations within a smart grid. Both projects involve sensing, collection, assimilation and interpretation of data regarding energy and building usage. By innovating techniques and systems to automate and improve this, the sponsoring company expects to make better informed and longer lasting asset management decisions, critical to the way buildings interface with the rest of the world.

About the sponsoring company: URS is a leading provider of engineering construction and technical services for private sector and public agencies around the world and is uniquely positioned in smart grid research in the UK and Internationally. You will be working within their London offices and supported by the University of Readings TSBE Centre, a unique EPSRC funded research environment for technologies to address UK plc’s sustainability agenda.

We are seeking self-motivated, pro-active and ambitious applicants with a background in one or more of the following areas: electronic engineering; signal processing; sensors; pattern recognition; data analysis and management. Applicants must possess a good degree (2:1 or higher) or MSc in a related area. The successful applicant will be a good communicator and will be driven to conduct

academically rigorous commercial research from within one of the world's leading engineering and environmental consultancies.

4 year Package

- Stipend of £20,000p.a
- All tuition fees are included
- Expenses package included
- EngD awarded by the University of Reading

Eligibility

Please note there are eligibility requirements, for more details refer to the EPSRC web site <http://www.epsrc.ac.uk/skills/students/help/Pages/eligibility.aspx>

Further details

Supervisors: Professor Li Shao (School of Construction Management & Engineering) and Dr Ben Potter (School of Systems Engineering)

Further information on the TSBE Centre can be found at: <http://www.reading.ac.uk/tsbe>

Applications

Applications should be made online through our website at:

<http://www.reading.ac.uk/Study/apply/pg-applicationform.aspx>

You also need to submit a full CV and Personal Statement to tsbe@reading.ac.uk

Vacancy Reference No: P35-2013

Interviews will be held 28/29 July for a proposed start date in October 2013.