

Imperial College London

Department of Mechanical Engineering

PhD Studentship in Radiographic Image Processing for Defect Detection

Applications are invited for a research studentship in the field of Non-Destructive Evaluation leading to the award of a PhD degree. The post is supported by a bursary and fees (at the UK/EU student rate).

The successful applicant will be joining a world-renowned research group, within one of the world's foremost research universities. The NDE group has an excellent record in fundamental and applied research, from the theoretical foundations through to technology transfer to industry. It is well funded by many industrial partners and public grant bodies.

The topic of the research is to develop techniques to assess the visibility of defects in digital radiographic images. Radiography is an important well-established Non-Destructive Evaluation technique for inspecting components for internal damage. Of great importance is being able to reliably assess the visibility of defects within the image, and work has been done on this in the past for film radiography. With the development of digital radiography and greater availability of simulation tools there is an important need to develop new techniques to assess visibility with today's technology. This work will involve work on image processing, and there will be opportunities to work with experts in computer vision. You will work closely with researchers from across NDE fields and adjacent areas, as well as EDF, the industrial sponsor of the project.

You will be an enthusiastic and self-motivated person who meets the academic requirements for enrolment for the PhD degree at Imperial College London. You will have a 1st class honours degree in Mechanical or Aeronautical Engineering, Physics, Applied Mathematics or a related field. You have an enquiring and rigorous approach to research, together with a strong intellect and disciplined work habits. You must have a strong interest and proven skills in mathematics and ideally computer programming experience. Good team-working and communication skills are essential.

To find out more about research at Imperial College London in this area, go to:
<http://www3.imperial.ac.uk/mechanicalengineering>

For information on how to apply, go to:
<http://www3.imperial.ac.uk/mechanicalengineering/study/pgresearch/opportunities>

For further details of the post contact Dr Peter Huthwaite p.huthwaite@imperial.ac.uk. Suitable candidates will be required to complete an electronic application form at Imperial College London in order for their qualifications to be addressed by College Registry.

Closing date: 6th November 2015

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Committed to equality and valuing diversity. We are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Two Ticks Employer, and are working in partnership with GIRES to promote respect for trans people