EPSRC CDT FUSE Internships

COLLEGE OF SCIENCE & ENGINEERING
COLLEGE OF SCIENCE & ENGINEERING ADMIN

Technical and Specialist - GRADE 2

Job Purpose
You will contribute to a summer research project as one of a team of undergraduate researchers as part of the Centre for Doctoral Training in Future Ultrasonic Engineering (FUSE CDT): a partnership between the University of Glasgow and the University of Strathclyde.

The internships aim to give students who are approaching the last year of their undergraduate degree an experience of working in a research environment alongside academics, PhD students and Post-Doctoral researchers. Based in the Centre for Medical & Industrial Ultrasonics (University of Glasgow) and the Centre for Ultrasonic Engineering (University of Strathclyde), motivated students are required to undertake an 8-week internship, during the summer before the final year of their degree (i.e. end of year 3 for a 4-year BEng/BSc degree, or end of year 4 for a 5-year MEng/MSci). However, University of Glasgow engineering students in an MEng programme are only eligible to apply in Year 3.

The two universities are at the forefront of ultrasonics research and the programme will place each intern within a working research team, experiencing and contributing to the latest global developments in the field of ultrasonics. It is a unique opportunity to gain insight into postgraduate research studies while learning and practising new sets of skills that are readily transferable to future careers. Equally important, the intern will have the chance to contribute, through their work, to a project selectable from areas in ultrasonics, across medical and industrial applications, benefiting society as a whole.

Paid internships are available for the summer of 2021, for 8 weeks full-time starting on the 5th July.

The internships are offered by direct appointment to the University of Glasgow however some of the internships will be located at the University of Strathclyde and some may require working across the two universities.

Main Duties and Responsibilities
Perform the following activities in conjunction with and under the guidance of the Principal Investigator

1. Assist in the planning and undertaking of assigned research in accordance with the project deliverables and project/group/School/College research strategy.

2. Collaborate on technical problems with colleagues and participate in team meetings.

3. Present research progress, and background material to the research team in internal seminars and at an event at which all vacation interns will be expected to present their work.

4. Assist in documenting research output, drafting technical/progress reports and papers as appropriate.

5. Develop research skills and techniques in line with desired career trajectory.

6. Undertake any other duties of equivalent standing as assigned by the PI.

These key tasks are not intended to be exhaustive but simply highlight a number of major tasks which the staff member may be reasonably expected to perform.

Knowledge, Qualifications, Skills and Experience
Knowledge/Qualifications

Essential:

A1 Completed year 3 of a 4-year BEng/BSc or year 4 of a 5-year MEng/MSci undergraduate programme as a student at the University of Glasgow or the University of Strathclyde.

Skills

Essential:
C1 Excellent ability to read subject material, and assimilate new concepts and ideas.
C2 Creativity in problem solving.
C3 Excellent communication skills (oral and written), and ability to communicate complex concepts clearly and concisely.
C4 Excellent interpersonal skills, including team working and the ability to mentor and support less experienced students.
C5 Appropriate time management skills.
C6 Self motivation, initiative and independent thought/working.

Experience

Essential:
E1 Sufficient relevant problem solving experience gained through undergraduate studies.

Desirable:
F1 Experience of presenting to an audience.
F2 Experience of scientific writing

Job Features
The aspects described below will be performed in conjunction with and under the guidance of the Principal Investigator / Co Investigator / Postdoctoral Research Assistant.

Dimensions
To carry out a range of research activities and functions within the scope of the project
Engage in personal, professional and career development to enhance both specialist and transferable skills in accordance with desired career trajectory.

Planning and Organising
Management of time and prioritisation of research activities.
Planning, organisation and implementation of research.
React to varying project needs and deadlines.

Decision Making
Participate decision making on various aspects of research project/activities.
Prioritise own workload.
Decide on research directions and goals within remit of original project proposal.
Suggest research approach adjustments to meet project outcomes.

Internal/External Relationships
Team colleagues: to exchange information to ensure efficient working.

Problem Solving
Research including technical and theoretical aspects/problem solving.