Graduate Internship Programme – Job Description

Job title	Graduate Research Assistant in Artificial Intelligence (role 4)
School / Department	School of Computing and Engineering
Line manager who the intern will report to	Dr Neda Azarmehr, Prof Massoud Zolgharni
Is this role hybrid working or permanently onsite at UWL?	Hybrid working

Please provide a one sentence description for advertising the role on the GI website
Doppler Flow Imaging and Analysis.   Applicants are invited for several Graduate Research Assistant positions to undertake research and development for innovative projects. All projects will focus on the implementation of state-of-the-art AI techniques in healthcare applications. For more information, please visit Internship Projects (intsav.github.io)

Main purpose of the job
The internship aims for the post holder to gain employability skills and experience working in a professional working environment and an understanding of aspects of the business.   The post is to provide support for ongoing research projects in the School of Computing and Engineering/ AI Lab.   The post-holder will assist with planning and coordinating research studies and will be involved in data collection, analysis, and support for some of the research's administrative aspects, e.g., preparation and distribution of research materials.   Graduate Interns will be supported throughout their internship with a programme of development and evaluation.

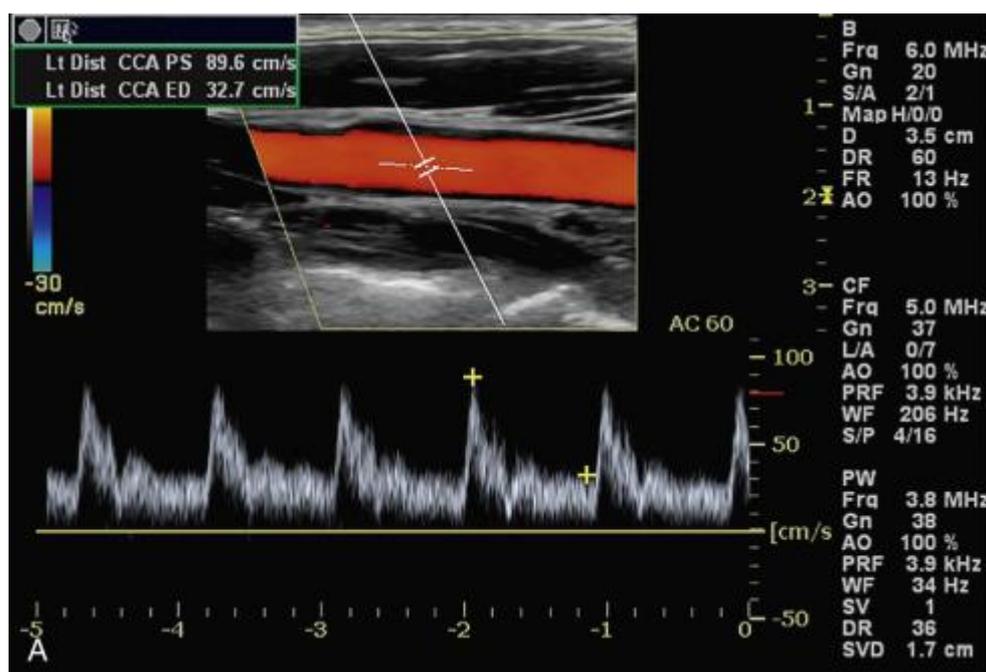| What you will gain from this internship |
|---|
| Technical skills: You will practice various AI and machine learning techniques, and tools. Hands-on experience: You will have the opportunity to work on real-world projects and apply the concepts you have learned in a practical setting. Networking: You will have the opportunity to build connections with other interns, mentors, and professionals, which can help you in your future career. |

- Problem-solving skills: You will learn how to analyse complex problems and develop solutions using AI and machine learning techniques.
- Communication skills: You will improve your communication skills by working with team members, presenting your work, and explaining technical concepts to non-technical stakeholders.

Overall, an AI-lab internship can provide you with a solid foundation in AI and machine learning and the skills and experiences needed to succeed in the field.

Key areas of responsibility

1. Data pre-processing: Preparing, cleaning, and transforming data to be used in Deep learning models.

2. Model development: Building and testing deep learning models using various algorithms and techniques.

3. Model evaluation: Evaluating the performance of models using various metrics and techniques.

4. Research and development: Conducting research on new AI and machine learning techniques and experimenting with new approaches.

5. Documentation: Creating documentation for machine learning models, code, and data pre-processing steps.

Overall, the key areas of responsibility involve working on projects related to data pre-processing, model development, model evaluation, and model deployment, as well as contributing to research and development efforts, collaborating with team members, and focusing on personal learning and growth.

For more information about available GI positions, please visit:

https://intsav.github.io/internship.html

Skills/knowledge required
• Background in AI, ML, and DL • Practical experience in programming in Python • Practical experience with one of the deep learning frameworks (e.g., TensorFlow, PyTorch)

Recruitment criteria
The graduate must have completed an undergraduate degree, BA/BMus/BSc/BEng/LLB etc. and be from the summer graduating class of June/July 2022.

Updated: Jan 2023