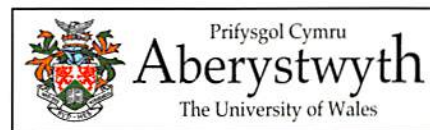# The Centre for Advanced Software and Intelligent Systems

The Centres of Excellence for Technology and Industrial Collaboration provide a world-class scientific, technical and research resource from universities in Wales for the benefit of local, national and international companies, including organisations that are seeking to invest in Wales.

The Centre for Advanced Software and Intelligent Systems (CASIS) is a joint venture between the Department of Computer Science at the University of Wales, Aberystwyth and the School of Computer Science at Cardiff University. Across these two sites, CASIS offers three types of service and many years of experience in collaborative projects with industry:

- Application software consulting and development
- Domain specific contract research
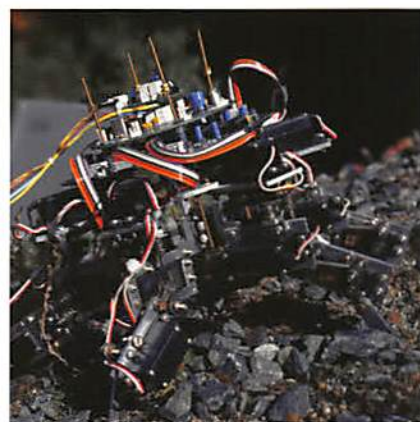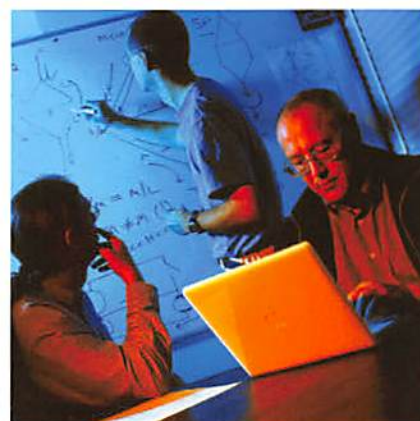- Training in specific aspects or skills within software engineering.

Aims

Our objective at CASIS is to provide industry, commerce and the public sector with innovative and cost-effective solutions across a broad range of applications. This stems from our belief in the value of unlocking the body of knowledge and experience which exists in universities and transferring this to the wider world.

Expertise

The breadth and depth of knowledge which CASIS is able to offer reflects the wide range of Computer Science research capabilities at the universities in Aberystwyth and Cardiff. Recognised as being among the leading such facilities in the UK, both departments have world-class expertise in these and many other areas:

- Telematics, networking and new Internet services
- Distributed systems processing including emerging Grid and HPC technologies
- Machine vision and image processing
- 3D motion capture and analysis
- VR modelling, simulation and visualisation
- Intelligent robotics and associated autonomous systems
- Evolutionary computing and genetic programming
- Qualitative reasoning and model based systems
- Bio-informatics and computational biology
- Large database systems interoperation and integration.

Prifysgol Cymru
Aberystwyth
The University of Wales

CARDIFF UNIVERSITY

PRIFYSGOL CAERDYⅮⅮ

wales Cymru

CENTRES OF EXCELLENCE
CANOLFANNAU RHAGORIAETH

Centres of Excellence is an accreditation scheme, managed by the Welsh Development Agency which is a sponsored body of the Welsh Assembly Government and is part financed by the European Union.

In delivering solutions of all types (application development, contract research or software skills training), CASIS implements a full project and quality management regime ensuring complete client satisfaction. Central to this approach is maintaining contact with our clients before, during and after the implementation phase at both technical and commercial levels.

Facilities & People

The Aberystwyth and Cardiff sites have access to some of the latest developments in computing hardware and software making a powerful computing infrastructure available to CASIS and our clients. In addition, CASIS offers its clients the benefit of working with some of the leading minds in Computer Science and Software Engineering in the UK today. This combination of people and machines makes for solutions of the highest calibre and innovation.

Clients & Applications

CASIS works with small and large organisations in both the private and public sectors throughout the UK. We undertake projects of any size ranging from a few days of consultancy to collaborative research lasting many years.

Workflow Management for National Library for Wales

As one of four copyright libraries in the UK, NLW receives a copy of all books published in Wales. With an archive of over 4 million artefacts, NLW decided to digitise their collection for reasons of conservation and restoration as well as making items more available to the public via the Internet.

One of two applications implemented for NLW, CASIS has provided a Workflow Management System which improves the efficiency and quality of their digitisation process. After consulting with NLW to understand their existing system, CASIS developed a software solution accessible over an intranet by different workers at different stages of the process.

Factory Automation for Invertek Drives

Invertek Drives manufacture energy efficient electrical motor controllers and hand-held command units. CASIS has worked with Invertek Drives since 2002 developing desktop PC and multi-platform PDA versions of their drive control software.

As well as allowing remote control of factory machinery, the software provides monitoring and diagnostic information about the drive units. Improvements made by CASIS to the functionality and user interface of their original product line have firmly established Invertek Drives as a global supplier in their market.

Peter Simmonds
Centre for Advanced Software & Intelligent Systems
University of Wales Aberystwyth
Department of Computer Science
Penglais Aberystwyth SY23 3DB

Tel: +44 (0)1970 628534   Email: pts@aber.ac.uk

For more information on Centres of Excellence please contact the WDA
Email: enquiries@wda.co.uk
www.wda.co.uk