

Research focus areas in the School of Information Technology

Computational Intelligence Research Group (CIRG)

The objective of this research group in the Department of Computer Science is to research computational intelligence. The research is theoretical and application oriented and the group uses computational intelligence to solve complex, real-world problems. The group is actively involved in research for industry.

Meta-context of Information Research Group

This research group in the Department of Information Science aims to produce high-quality research outputs that deal with the representation, production, regulation and consumption of information. The fields explored include investigating the philosophical and ethical aspects of information and monitoring information-related laws.

The Health Information Systems Research Group (HIS)

This research group in the Department of Informatics explores how modern technology can best be used to develop the health sector. It aims to educate and train students and health care workers in the analysis, design and implementation of information system applications, to strengthen existing health information systems, to support the sharing of experiences and practices and to provide collaborative research opportunities in the health sectors of developing countries.

Information Processes Research Group

This research group in the Department of Information Science aims to advance the investigation of a wide variety of information processes to make information accessible according to the needs of human users. It also promotes and encourages interactions among professionals from research and practice.

Information and Computer Security Architectures Research Group (ICSA)

This research group in the Department of Computer Science researches computer and information security. It aims to find innovative security solutions for state-of-the-art technologies such as finding solutions to better protect existing technology that is applied in a new context.

Knowledge Management Research Group

Knowledge management is the management of the resources (staff, finance, systems services and infrastructure) needed to ensure the effective flow of knowledge in an organisation and between an organisation and its external environment. This research group in the Department of Information Science focuses on facilitating the generation, sharing and reuse of knowledge as a strategic and competitive advantage for organisations.

Espresso/FASTAR Research Group

This research group in the Department of Computer Science combines theory and practice to enhance the efficiency and effectiveness of software and its environment. Espresso focuses on software engineering and the creation of sound software processes and development techniques. FASTAR researches efficient and effective algorithms for a variety of applications such as intrusion detection systems, spelling checkers and other pattern matching contexts.

Information Systems and Education Research Group

The objective of this research group in the Department of Informatics is to provide a local and international forum for educators to discuss research and practices concerning the role of ICT in education, as well as the teaching of informatics and the training of IT specialists.

Book and Publishing Studies Research Group

This group in the Department of Information Science encourages historical, contemporary and futuristic investigations into every dimension of book culture and other print and non-print media. Its research investigates areas such as authorship, writing and origination practice, print media production processes, print media history, book selling, book consumption, readership and teaching.

Information Systems and the Organisation Research Group

This group in the Department of Informatics researches the advancement of concepts, methods, techniques and tools available to investigate issues related to information systems and organisations. It studies the planning, analysis, design, construction, modification, implementation, utilisation, evaluation and management of information systems that use IT to support and coordinate organisational activities.

Polelo Research Group

The objective of this group in the Department of Computer Science is to enable computers to communicate more effectively with each other. It researches distributed systems, programming languages and web-based technologies. ☎