


Excellent science and technology connecting

# Information Technology and the Digital Society

DCU is at the forefront in developing breakthrough solutions in Data Analytics and Big Data that are addressing the challenges of next generation ICT.

 Cloud Computing

 Networks Communications and Smart Grid

 Information Systems & Data Analytics/Language Technologies

 Sensor Web Technologies

 Image Process Analysis

 Modelling and Scientific Computing

 Health and Human Performance



For new ideas and breakthroughs in ICT speak to DCU

## We are working for organisations to:

- ✓ Fully exploit and analyse data across diverse sectors to enable improved decision making
- ✓ Address the challenges of Big Data in Industry 4.0
- ✓ Take the lead in IoT by translating your smart products and innovations into operational deployments
- ✓ Discover solutions in language and translation technologies
- ✓ Focus on innovations in engineering technologies that will support future Global ICT development
- ✓ Increase your business agility, operational efficiency and market reach using the cloud

## Cloud Computing



- Business Models and Best Practice
- Cloud Applications
- Cloud Services Development and Architectures
- Security and Governance

## Sensor Web Technologies



- Multimodal Media Analysis
- Human Interaction Analytics
- Real World Life-Logging
- Navigation of Digital Archives
- Personal Sensing
- Social Network Analysis

## Networks Communications and Smart Grid



- Network Processor Design – Switching/Routing
- RF Propagation Modelling
- Mobile and Wireless Communication Performance
- Wireless Sensor Networks
- Quality-Oriented Adaptive Multimedia Delivery
- Adaptive Web-Based Systems

## Image Process Analysis



- Vision Systems Engineering
- Quantitative Image Analysis
- Medical Image Analysis
- 3D Imaging/Computing Cluster
- Imaging (Acquisition) & Visualisation
- Prototyping Environment

## Information Systems & Data Analytics/Language Technologies



- Localisation
- Digital Media
- Social Media Analytics
- Educational Media and Services
- Entertainment (eGames/eBooks)
- Service Interoperability & Consolidation
- Risk Analytics and Management
- Global Content Strategy
- Regulatory Compliance
- Fraud Detection and Avoidance
- Development of Reliable and Secure Software

## Modelling and Scientific Computing



- Mathematical Model/Data
- Algorithm Design/Implementation
- Numerical Simulation/Data Mining
- Model Validation/Interpretation
- Computational Results Presentation

## Health and Human Performance



- Sensor Data for Performance
- Energy Analysis for Interactive Gaming
- E-Diary Athlete Management
- Technology Assisted Patient Care

## Work with DCU

**We help solve your problems:** We provide technologies, expertise and specialist services that help solve the challenges you face. We help you to leverage state funding to enhance your research and innovation capability. Our resources provide solutions to commercial firms, social enterprises, cultural organisations, NGOs and government departments. Contact us to see how we can help you.

## For further information

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