Lero - The Irish Software Research Centre

Lero brings together leading software teams from universities and institutes of technology in a co-ordinated centre of research excellence with a strong industry focus.

Ireland has a vibrant and successful software sector, with nine of the world’s top 10 multinational technology companies having a significant presence in Ireland. Lero is a key pillar of that sector. Since it was founded in 2005, it has become one of the best known and most highly regarded software research centres in the world. It is home to 289 researchers and funded to the tune of €41m.

Research Areas

› Methods and standards for high integrity software
› Autonomous and adaptive systems
› Software performance
› Adaptive security and privacy

Research programmes

Our many research projects include:

› ARC – Ensuring software code consistency with architecture
› ASCENS – Autonomic service components ensembles
› MANSEC – Managing the security of evolving and adaptive systems
› MANYCORE – Understanding software performance on many-core hardware systems
› Real-time log analytics in the cloud
› FOSOMO – Feature-oriented modernisation of legacy software
› Multi-level smart city sustainability ecosystems
› Applying flow techniques to software engineering projects
› Developing metrics for large-scale agile software engineering processes
› Model-based diagnostics with provable properties
› Software for analytics and security

Academic partners

› University of Limerick
› Dublin City University
› Dundalk Institute of Technology
› NUI Galway
› Maynooth University
› Trinity College Dublin
› University College Cork
› University College Dublin

Industry and commercialisation

Lero works with a wide range of industry sectors, state agencies, educational bodies and international collaborators to deliver on its twin goals of research excellence and social and economic relevance.
Industry partners include:

- ACI Worldwide
- Ada Security Systems
- Aerogen
- Allstate Insurance (NI)
- Almir Business Ltd
- Bluebridge Technologies Ltd
- Comfort Keepers
- dabl Health
- Dell
- DMF Systems
- Drop Technology
- Ericsson
- European Space Agency
- Fijowave
- Hermitage Medical Clinic
- Hewlett Packard Company
- IBM
- Information Mosaic
- Intel
- Kugler Maag
- Lumension
- Microsoft
- Movidius
- Novartis
- Ocuco Ltd
- Portable Medical Technology
- ProDevelop
- QAD
- RedMed
- Rigney Dolphin Group
- S2 Grupo
- S3 Group
- Software Quality Systems
- Storm Technology
- Two-Ten Health
- TXT Group
- United Technologies Research Centre
- Vitalic
- Volkswagen
- Vu2Vu
- Zimory

Key Contacts

Prof Mike Hinchey
Centre Director
mike.hinchey@lero.ie

Mike Hinchey is Professor of Software Engineering at the University of Limerick. He was previously director of the Software Engineering Laboratory at NASA Goddard Space Flight Centre in Greenbelt, Maryland. He has held a number of professorships, both visiting and permanent, in the University of Nebraska, Queen’s University Belfast, New Jersey Institute of Technology, the University of Skovde in Sweden and the University of Queensland in Australia.

Prof Brian Fitzgerald
Chief Scientist
brian.fitzgerald@lero.ie

Brendan O’Malley
General Manager
brendan.omalley@lero.ie

Clare McInerney
Education and Outreach Manager
clare.mcinerney@lero.ie