

# ADAPT, SFI Research Centre for Digital Media Technology

ADAPT is the world leading SFI research Centre for Digital Content Technology. ADAPT's research vision is to pioneer new forms of proactive, scalable and integrated AI-driven Digital Content Technology that empower individuals and society to engage in digital experiences with control, inclusion and accountability with a long term goal of a Balanced Digital Society by 2030.

A World  
Leading SFI  
Research  
Centre



Engaging Content  
Engaging People



ADAPT researchers are concerned with personalised, immersive and multimodal digital engagement from multiple perspectives - individual, algorithmic, enterprises and society.

## Research Areas

ADAPT is pioneering new techniques and technologies in Personalisation, Human Conversational Interfaces, Analytics and Knowledge Extraction, Intelligent Machine Translation & Enhanced Human Translation, Dynamic Personalised Digital Media Discovery, Recomposition, and Interaction, Multimodal Engagement, and is setting the standards for the management of data governance, privacy and ethics in content processing.

- ADAPT is pushing the boundaries of human speech and gesture recognition to increase the accuracy of robotic interpretation
- We extend the effectiveness of all the MT system types across a wide range of languages and domains to break down communications barriers.
- Our Machine Learning models enable the analysis of complex data such as financial data sets giving accurate results on large scale data sets
- ADAPT's technology facilitates the recognition of relationships between multi-dimensional data sets by providing new ways to interpret, interact with and gain insights from data.
- ADAPT's advanced research in Virtual/Augmented Reality, HCI, Robotics, Personalised Agent Interaction enables approaches for designing and assessing successful interaction and engagement in such environments.
- ADAPT's applications of data governance, ethics and standards technologies empower individuals to navigate new engagement channels with confidence through visibility and control of their personal data.

## Research Programmes

Many of ADAPT's 300+ researchers collaborate on research projects with industry partners. The current projects include:

- Next Generation Recommender Systems – A Collaborative, Contextual, and Content-Based Recommender
- AI-Powered Video Discovery and Engagement - Leveraging knowledge graphs for semantic video summarisation
- AI Environment Mapping and Modelling - Discovery and geotagging of assets in street-level imagery
- Dialogue Machine Translation - Building Realtime, task-oriented dialogue translation systems
- Natural Language Processing (NLP) – to drive innovation and automation in data governance platforms

## Facilities

- Multidisciplinary collaboration
- Machine learning for media and content analytics
- Content-aware multilingual search and discovery technologies
- State-of-the-art interactive information retrieval and meta-data semantics models
- World-leading language technology systems
- Personalisation and delivery applications for textual and multi-modal content
- Graphics animation (AR/VR)
- Visual Computing
- Knowledge Engineering and Semantic Web
- Dedicated Design & Innovation Lab (dLab) aims to solve immediate business needs by leveraging the outputs of platform research to generate commercial impact for ADAPT partners

HOST INSTITUTION



Trinity College Dublin  
Coláiste na Tríonóide, Baile Átha Cliath  
The University of Dublin



PARTNER INSTITUTIONS



University College Dublin  
An Coláiste Ollscoile, Baile Átha Cliath



## Industry and Commercialisation:

By enabling deeper engagement for users, ADAPT enhances efficiencies and global reach for a range of industry partners seeking solutions in AI for Media Interaction, Digital Media Technologies, Digital Health, Data Governance, and Fintech through its design and innovation Lab. In addition, ADAPT supports AI entrepreneurs from start-ups to spin out.

- > Accenture
- > Air Learning
- > Ancestry
- > BNY Mellon
- > Brite:Bill
- > Collibra
- > Deutsche Bank
- > eBay
- > Eir
- > Experi
- > Fidelity
- > Genesys
- > Glandore
- > GMI
- > Huawei
- > IBM
- > Iconic
- > Informatica
- > Mazda
- > Moravia
- > Microsoft
- > Novartis
- > OSI
- > Ryanair
- > Synchronoss
- > Xcelerator

## Education and Public Engagement:

ADAPT's EPE programme aims to empower the Irish public to engage fully in our rapidly-evolving digital landscape and to foster an interest in, knowledge of, and appreciation for the emerging technologies driving change in digital media and technology. ADAPT's EPE activities organised under three pillars, provide opportunities for the Irish public to learn about engaging in our digital world and to have a voice on the future of this vital area of research.

**LEARN:** ADAPT aims to foster the skills necessary in the Irish public to engage effectively in our future digital world.

**INTERACT:** ADAPT provides opportunities for the public to explore and interact with emerging and future digital technologies, to understand and consider the impact of such technologies on their lives and on society.

**ENGAGE:** ADAPT provides opportunities for the public to participate directly in ADAPT research in areas with significant potential for societal impact, such as digital overload, AI and trust, systems bias, and data privacy.



## Key Contacts

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