

# CeADAR

National Centre for Applied AI  
in Ireland

---

Presented by: **Quan Le**  
**Research Fellow**





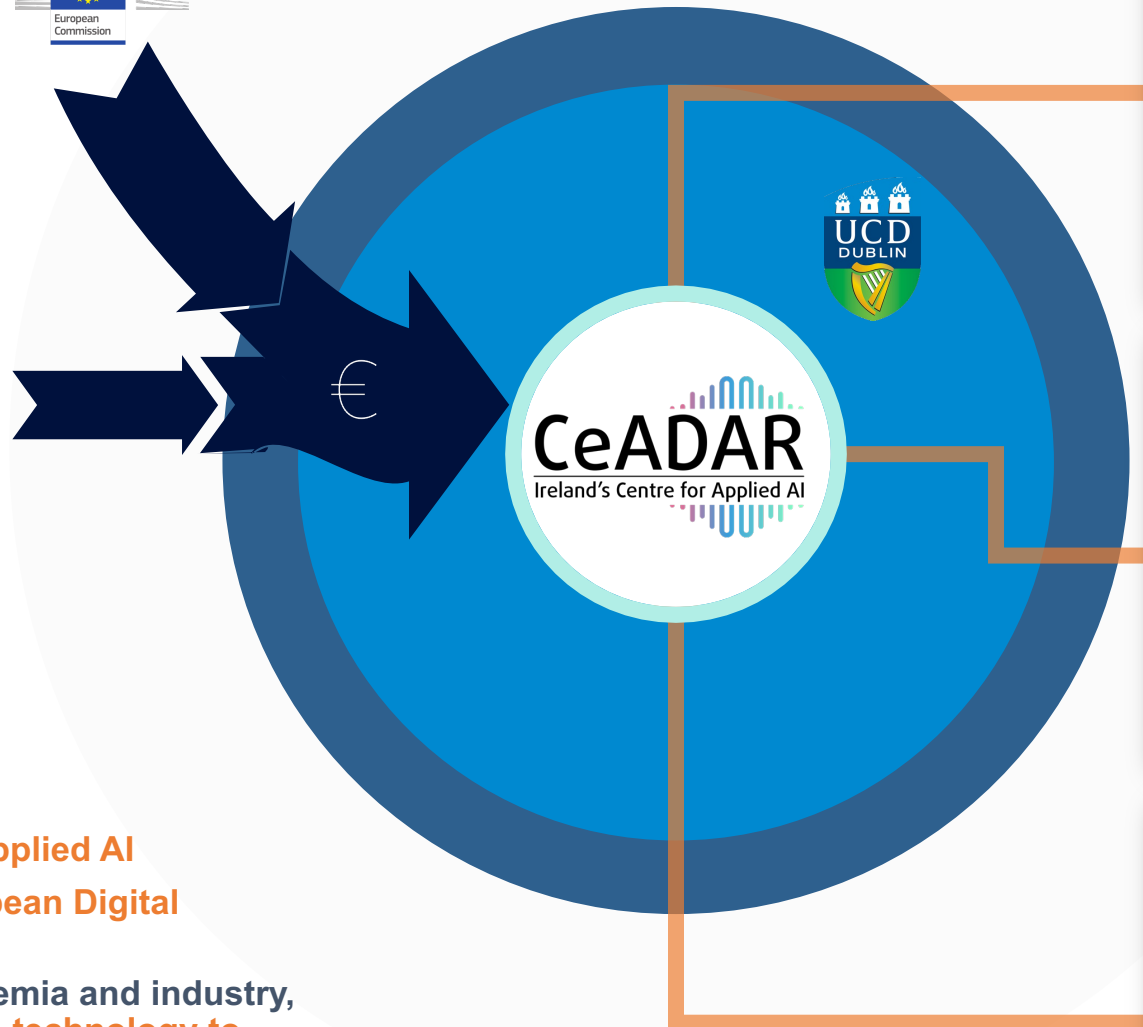
Contract Research



National Funding instruments



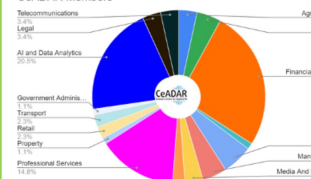
EU Funding instruments



## CeADAR Membership



CeADAR Members



## AI Technologies



## Project Themes and Industry Verticals



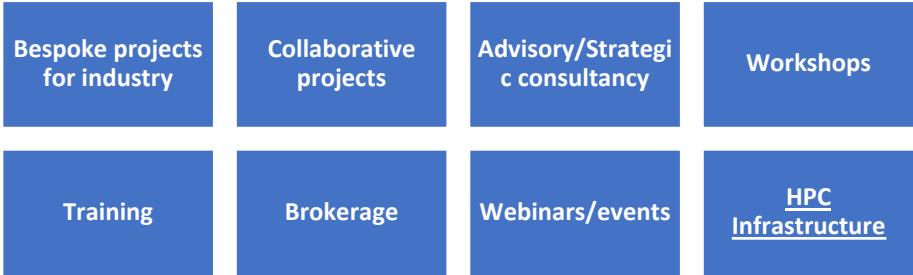
- National Centre for **Applied AI**
- Newly awarded **European Digital Innovation Hub**
- Bridge between academia and industry, applying cutting edge technology to industry



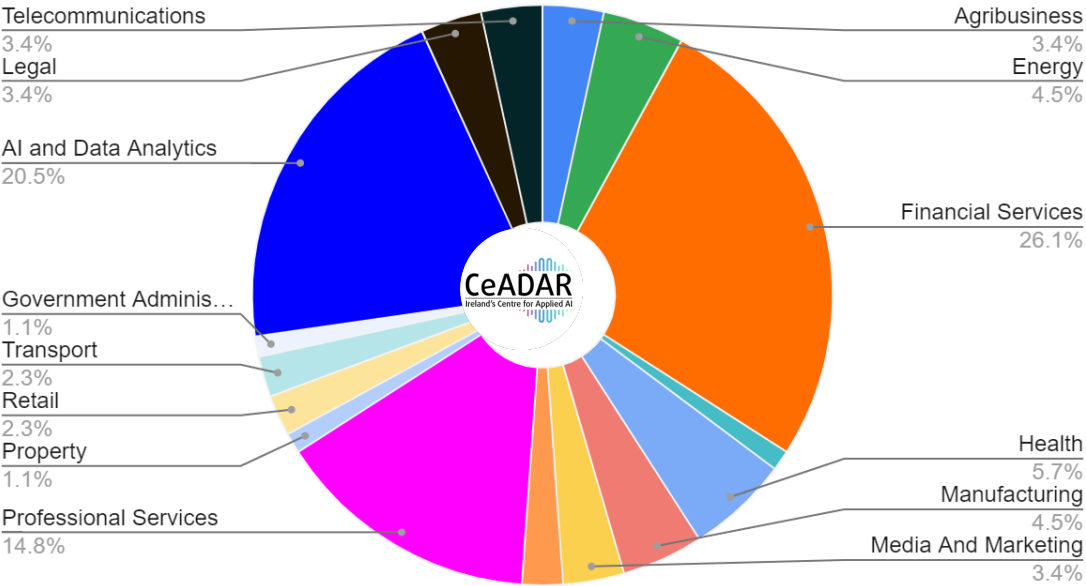
# CeADAR Membership




90+ Industry Members



CeADAR Members



# AI Technologies

							
<b>Machine Learning</b>	deep learning	Reinforcement Learning	<b>Data Visualisation</b>	Big Data	<b>Blockchain</b>	Data Mining	Data Warehousing and management
							
explainable AI: XAI	Recommender Systems	<b>Computer Vision/Image Analytics</b>	Predictive Analytics	<b>NLP/Text Analytics</b>	Audio Analytics	Real Time Streaming Analytics	Time Series Analysis



# Cybersecurity and Malware Detection

## Publications

ELSEVIER

Highly cited publication

DFRWS 2018 USA — Proceedings of the Eighteenth Annual DFRWS USA

### Deep learning at the shallow end: Malware classification for non-domain experts

Quan Le <sup>a</sup>, Oisín Boydell <sup>a</sup>, Brian Mac Namee <sup>a</sup>, Mark Scanlon <sup>b</sup>

Nov 2022: [Expert Systems and Applications](#)

Dec 2021: [Forensic Science International](#)

Identifying Internet of Things software activities using deep learning-based electromagnetic side-channel analysis

Quan Le <sup>a</sup>, Luis Miralles-Pechuán <sup>b</sup>, Asanka Sayakkara <sup>c</sup>, Nhien-An Le-Khac <sup>d</sup>, Mark Scanlon <sup>a</sup>

Fusing feature engineering and deep learning case study for malware classification

Daniel Gibert <sup>a</sup>, Jordi Planes <sup>b</sup>, Carles Mateu <sup>b</sup>, Quan Le <sup>a</sup>

## Demonstrator



[Machine Learning for Cybersecurity](#)

## H2020



Machine Learning for cybersecurity Malware detection - MSCA

## Collaborators



UCD CCI, UCD Forensics and Security Research



Centre for Secure Information Technology - QUB



IBM Security

## Expertise/Interests



Digital forensics to fight cybercrime



Multimodal and robust Malware detection  
Intrusion Detection

# Thank You

[quan.le@ucd.ie](mailto:quan.le@ucd.ie)