# Digital Catapult

Accelerating the Adoption of Advanced Digital Technologies in the UK

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Dr Alex Gluhak, Head of Technology

alex.gluhak@digicatapult.org.uk



Accelerating the earlier adoption of advanced digital technologies across the UK.

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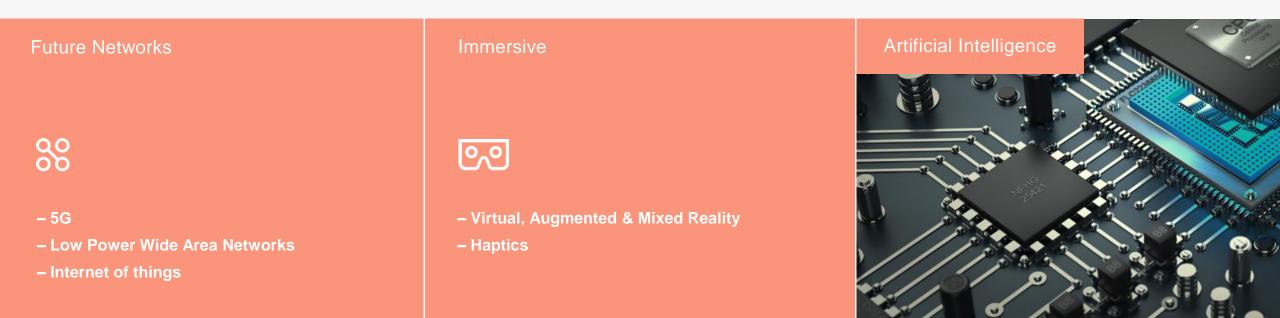




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Future Networks	Immersive	Artificial Intelligence
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– 5G – Low Power Wide Area Networks – Internet of things	– Virtual, Augmented & Mixed Reality – Haptics	– Artificial Intelligence – Machine Learning



# Industry Focus - Focused on two key industries with the most growth potential in the UK economy.

#### Manufacturing



Accelerating the number of trailblazer companies working with advanced digital technologies in manufacturing in the UK.

#### Creative

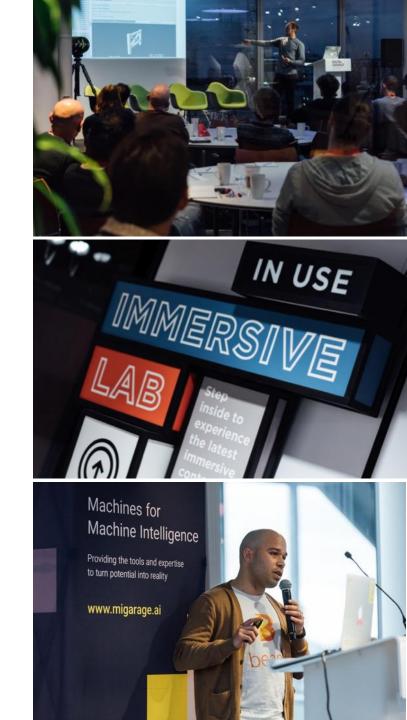


Delivering increased research, development and innovation in Advanced Digital Technologies for the Creative Industries.

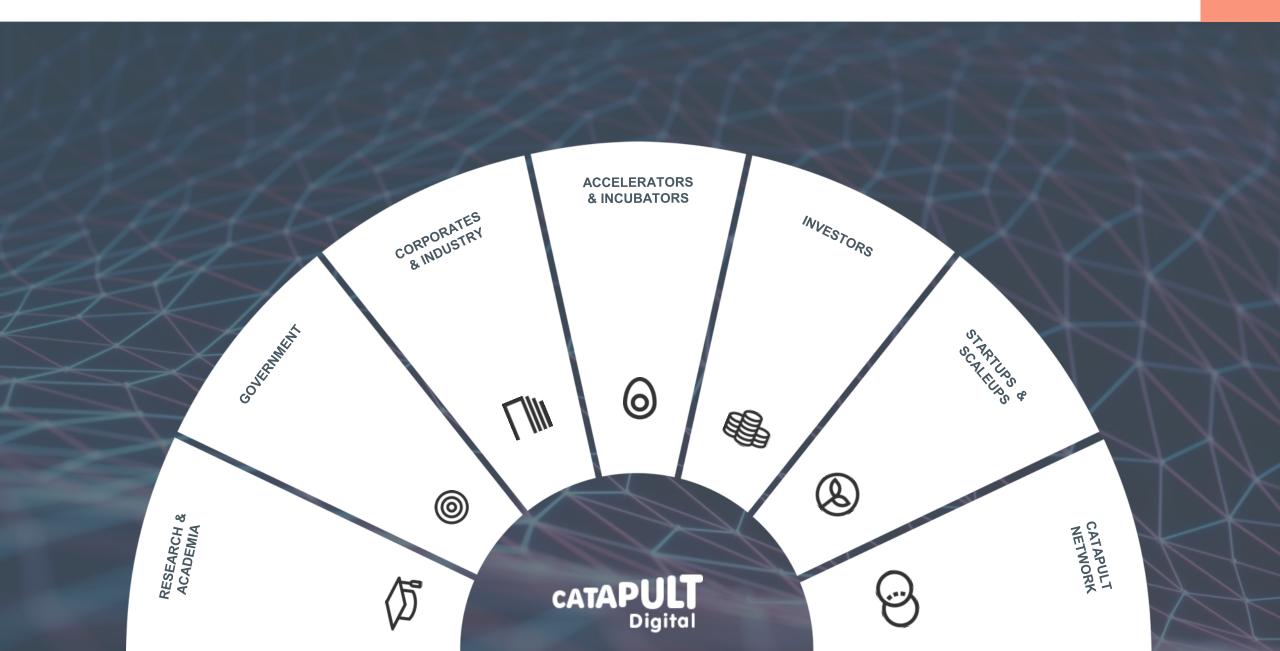


As completely neutral and experts at the cutting edge of digital, we have a unique position in the economy to deliver impact in these areas. We do this in three ways:

- Build and operate physical or digital facilities that accelerate UK growth in advanced digital technologies, that would not exist or be available to companies were it not for Digital Catapult's intervention.
- Delivering specialised innovation programmes, to accelerate earlier adoption and bring together startups, scaleups and SMEs with corporates and academics.
- Facilitating and delivering collaborative research and development leading to commercial exploitation and de-risking more speculative experimentation.





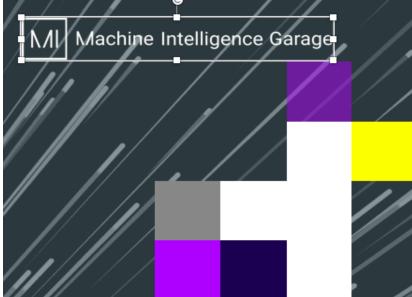




### Augmentor

10 weeks programme supporting start-ups working with immersive tech in partnership with Seedcamp

Focused on companies developing innovative and commercially-focused applications of augmented, mixed and virtual reality.



## **MI** Garage

Helps SMEs access the computation power and expertise they need to develop and build machine learning and artificial intelligence solutions

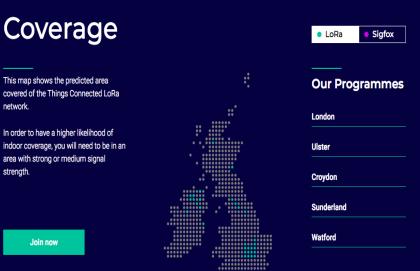
8-10 weeks programme for AI/ML SMEs that are data ready and have immediate need for computation

## **Things Connected**

Challenge led IoT innovation programmes with industry

Providing expertise and access to LPWAN networks and testbeds for pilots to SMEs

## ThingsConnected









Hosted hardware (NVidia DGX-1 and Graphcore IPUs)



Cloud computing vouchers



11

Access to existing UK HPC infrastructure

Experimentation space with new ML chips

Some early facts and figures

- 3 Cohorts since Jan 2018
- Companies applied: 57
- Companies onboarded: 20
- Average team size: 7 (Range 2-15)
- Impact: over £1m in convened income











MIT

Sawbridgeworth

Harlow



**London partners** 

CATAPULT Future Cities

KING'S College

LONDON

Harpenden Welwyn Garden City Hatfield Hemel Berkhamsted St Albans Hempstead A1(M) Chesham M25 Potters Bar Amersham Watford Borehamwood

Harrow

Richmond

Kingston

upon Thames

A243 Epsom

Redhill

Outstanding

latural, Beauty

Twickenham

M25

stone

M40

Slough

Windsor

M4

Egham

Woking

Guildford

Colne Valley Regional Park Uxbridge

M25

Chertsey

Weybridge

East Horsley

Hayes

M4

50+ Gateways

CATAPULT

Imperial College

London

Digital

1100+

Users

2 Innovation programmes 40 **SMEs** supported 600+ LPWAN

B

**≜UCL** 

BT

Queen Mary

University of London

Community





## UK wide programmes – Regional partnerships to accelerate LPWAN innovation and increase national network coverage. Twelve month programme aims to support more than 100 UK SMEs, deploy more than 200 additional radio sites, including both LoRaWAN and Sigfox technologies.





# Council led innovation challenges – Currently supporting 2 London councils to engage with innovators around their challenges. A further programme with 5 other councils planned next quarter.

### Watford Borough Council



£20k for SMEs



4 base stations

- Foot fall in the city centre
- Monitoring in taxi ranks
- Environmental monitoring

### **Croydon Borough Council**



£20k for SMEs



- Social care and independent living
- Traffic monitoring
- Environmental monitoring



Smart bike light with environmental sensors

Pilot in Belfast involving 200 hire bikes



EATH IN THE CITY THEN GARNER ATMINU People counter for space management

Pilots in NHS trusts, 5+ contracts





# SEE.SENSE®



Flexible sensing platform, AQ monitoring Beringar

Facility management for social housing

Doubled in size and then acquired by main customer



Pilot in 600 buildings with Camden council



# Thank you

### Alex Gluhak, Head of Technology, Lead Technologist IoT

Digital Catapult 101 Euston Road London, NW1 2RA 0300 1233 101 info@digicatapult.org.uk

alex.gluhak@digicatapult.org.uk