

Insight Research

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In our lecture, Dr Aoibhéann Bird came in to talk to us about the Insight Research Centre, and the work they do in regards to data analytics. Dr Bird is the Education and Public Engagement Manager at Insight, and during her presentation showed us what they did, with a focus on smart technologies and their uses in sport and health.

The importance of data

In our ever-advancing society today, it is clear that data is a very important asset to have. It has both positive and negative uses, a negative one, for example, is the Chinese government's control over their population using facial recognition and a social scoring system.

Despite this, there are many positive uses for data such as in sports research, health, and businesses also. An example of this is how health agencies analyse Twitter keywords to preempt and track outbreaks of norovirus and the flu.

Overall data, and good data analytics, can help further us as a society and make our lives easier.

The Insight Centre for Data Analytics

According to its website, The Insight Centre for Data Analytics is a joint initiative between researchers at DCU, NUIG, UCC, UCD and other partner institutions. Insight brings together more than 400+ researchers from these institutions, 100m+ funding, and with over 80+ industry partners, to position Ireland at the heart of global data analytics research.

Insight Overview

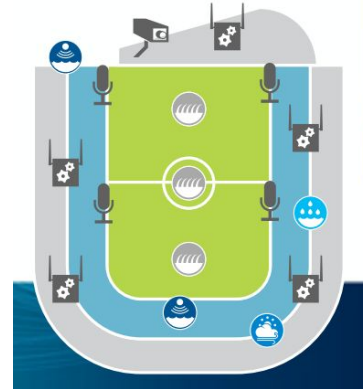


4 Co-Lead Universities <small>4 partner institutions</small>	Built on 20 years of research in Data Analytics and AI
450+ Academics, Postdocs, PhDs, RAs	1395+ Scientific conference and journal papers
83+ Funded collaborations with industry partners	300+ Research Awards over 4 years
8 Spin out companies 57 license agreements	60+ H2020 consortia, 580+ collabs., 40 countries
1,137+ school visits, 28,000 students	250 PhD students graduated,

The Insight Centre has worked in areas such as Multimedia Analysis, Artificial Intelligence, Human Performance, and Biosensors.

Sports Analytics

Dr Bird spoke of certain aspects of analytics in sports, including Exciting Event Detection, Shot Type Classification, Team Behaviour, Scoreboard Detection, and Sport Preservation. The Smart Stadium project in Croke Park also contributed to this, as The Insight Centre were also involved in this. Croke Park is used as a testbed for different IoT and smart technologies, which includes analytics. Projects specific to the Smart Stadium project and which have been tested and used to great success in Croke Park include Sound Monitoring, Crowd Behaviour, Pitch Monitoring, and Flood Management.



Technology in the Health sector

Dr Bird also spoke of wearable technologies and their benefits towards health and analytics in regards to this. She spoke of wearable sensors for people with neurological diseases such as Alzheimer's and how they can help. Interacting with Alzheimer's patients using Lifelogging technology helps provide memory assistance and address cognitive problems.

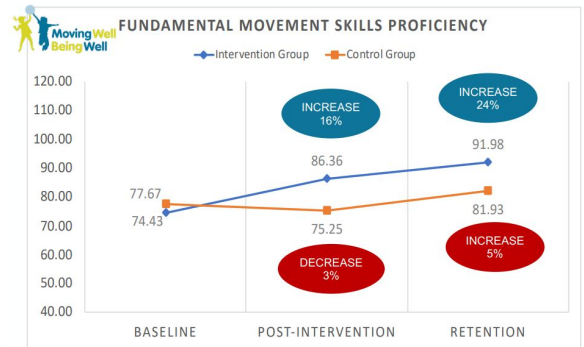
Another example is the SwEatch device, which can monitor sweat composition in real-time, specifically sodium and other analytes in sweat. This helps with monitoring athletes and their abilities and analysing what happens to their bodies when working out or under stress.



Moving Well Being Well

Dr Bird also spoke about the Moving Well Being Well initiative by Sport Ireland and the benefits of physical exercise in children. According to the WHO, Ireland is to be the most obese nation in Europe by 2030, which is a frightening prediction. The Moving Well Being Well initiative assessed 2,148 children across Ireland in 44 different schools. They took measurements in multiple areas such as Muscular Strength, Cardiovascular Endurance and Fundamental Movement Skills.

This initiative held a study based on this with two groups, an intervention group and a control group. The intervention group showed very encouraging results with a 16% increase in movement skills and a 24% increase in skill retention. The benefits of being physically active, especially for young people, cannot be understated.



Final Thoughts

Overall I found Dr Bird's presentation very interesting, and her focus on sports had me very engaged during the presentation. The benefits that technology can bring into this area and in health also is amazing and I'm sure this can only improve everyone's lives immensely, especially in the future.

Smart technologies and IoT devices are slowly creeping into our everyday lives, and as someone who is very interested in technology and its impact on people, I look forward to seeing what other advancements will be made and what the intelligent people working with organizations like The Insight Centre can come with.