What is Lifelogging? In this lecture, lifelogging represents a phenomenon whereby people can digitally record their own daily lives in varying amounts of detail, for a variety of purposes. In a sense it represents a comprehensive “black box” of a human’s life activities and may offer the potential to mine or infer knowledge about how we live our lives. As with all new technologies there are early adopters, the extreme lifeloggers, who attempt to record as much of life into their “black box” as they can. While many may not want to have such a fine-grained and detailed black box of their lives, these early adopters, and the technologies that they develop, will have more universal appeal in some form, either as a scaled-down version for certain applications or as a full lifelogging activity in the years to come.

At present, life logging becomes very popular in our daily life. In this lecture, the speaker introduced the research of modern lifelogging or quantified self research which has been on going since the MyLifeBits project from Microsoft in the early 2000s. However, the progress has been slow, the biggest problem due to a lack of datasets to support repeatable experimentation and a lack of understanding about the positive applications of lifelogging for the individual. In this talk, the speaker who named Cathal Gurrin from Dublin City University explored the motivation for lifelog research, at the same time, he illustrates the notable efforts underway to progress lifelog research and he also highlights the comparative benchmarking exercises that have been run in recent years that are advancing the community. At the end of the lecture he also suggests the future pathway for us that lifelogging research will likely take in the coming years.

Lifelogging may offer benefits to content-based information retrieval, contextual retrieval, browsing, search, linking, summarization and user interaction. However, there are challenges in managing, analysing, indexing and providing content-based access to streams of multimodal information derived from lifelog sensors which can be noisy, error-prone and with gaps in continuity due to sensor calibration or failure.

This is my pleasure to attend this presentation given by professor Gathal Gurrin who worked in Dublin City University. At the beginning of this lecture, the professor told us what is the lifelogging? Lifelogging refer to the process of storing data concerning the life activities of an individual for future use, for example the human ledgers and the self-search. A physical ledger named Richard Buckminster Fuller once said : "If somebody kept a very accurate record of a human being ...I decided to make myself a good case history of such a human being and it meant that I could not be judge of what was valid to put in or not. I must put everything in, so I started a very rigorous record".

At the same time Vannevar Bush also said: "A record if it is to be useful to science, must be continuously extended, it must be stored, and above all it must be consulted... Consider a future device for individual use, which is a sort of mechanized private file and library... a device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory." And with the development of technique, sensor becomes very common in our daily life, in Gordon Bell’s “My life bits”, we can know that Sensors can also log the three billion or so heartbeats in a person's lifetime, along with other physiological indicators, and warn of a possible heart attack... spot irregularities early providing warnings before an illness becomes serious. Your physician would have access to a detailed, ongoing health record, and you would no longer have to rack your brain to answer questions such as "When did you first feel this way?", meanwhile, the father of wearable computing, Steve Mann told us: "What I argue is that if I'm going to be held accountable for my actions that I should be allowed to record... my actions. Especially if somebody else is keeping a record of my actions".

In our modern life, there still has many apps to record our daily life such as, the google map which records our location, the wechat or facebook we put our photos or words in the internet to share our life events.

However, I think it is important to consider that lifelogging is typically carried out ambiently or passively without the lifelogger having to initiate anything. There have been a number of dedicated individuals who are willing to actively try to log the totality of their lives, but these are still in the very significant minority. While such dedicated lifelogging is currently atypical, most of us often explicitly record aspects of our lives such as taking photos at a social event. In such cases there is a conscious decision to take the picture and we pose and smile for it. Lifelogging is different, in that by default it is always-on unless it is explicitly switched off and it operates in a passive manner. Therefore the process of lifelogging generates large volumes of data, much of it repetitive.Thus the contents of the lifelog are not just the deliberately posed photographs at the birthday party, but the lifelog also includes records of everything the individual has done, all day (and sometimes all night), including the mundane and habitual.

Meanwhile, about the end-to-end processes of lifelogging and the applications which then use the lifelog, are complex and involve many challenges and multiple disciplines. Starting at the beginning and at the hardware level, are the sensors themselves which, in the case of wearable sensors, need to be robust and unobtrusive because the human body is a harsh environment for any kind of sophisticated technology. In conclusion, They must be tolerant to drift in calibration and not require re-calibration too often if at all. Wearable sensors should also be small enough that they do not interfere with our everyday activities, and they need to have enough battery life to last at least a complete day without needing replacement batteries or re-charging.

In the future, I think the life logging could help us in many aspects such as health, or in communications and so on.