



**Trinity College Dublin**

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

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# **CSU33012 Software Engineering**

## **Biography of a key software engineer**

### **- Mike Hinchey**

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**Luke McGrath**  
**17337376**

1<sup>st</sup> November 2020

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# 1 Introduction

This document is a biographical essay about a software engineer that I found particularly interesting and influential. In particular this essay is about Professor Mike Hinchey, an Irish software engineer who is currently the Professor of Software Engineering at University of Limerick. Prof Hinchey was previously Director of the Software Engineering Laboratory at NASA Goddard Space Flight Centre in Greenbelt, Maryland. The work he did at Nasa was implemented in many space missions and will also be utilised in future missions. He remains a consultant to Nasa. Prof Hinchey was also the Director of Lero, the Science Foundation Ireland Research Centre for Software. Alongside software engineering, Prof Hinchey specialises in many other areas such as Engineering or Mathematics, but this essay will mainly focus on his software engineering career.

## 2 Mike Hinchey - Biography

### 2.1 Early Life

There is not much information available on the early life of Mike Hinchey, however there are bits and pieces available from which we can gain an understanding of how he became the amazing software engineer that we see today. Prof Hinchey was born in Limerick in 1969. He studied at the University of Limerick as an undergraduate, studying Computer Systems. He excelled during this time, finishing as the leading student in his class in the graduating year. He then went on to study Computations at Oxford University ( Wolfson College) for his MSc and Cambridge University (at St John's College) for his PhD in Computer Science. With qualifications like these,

studying at some of the most exceptional universities in the world, it is no surprise that Prof Hinchey became such an influential figure in the software engineering world.

## **2.2 Work with NASA**

Prof Hinchey was once the Director of the Software Engineering Laboratory at the NASA Goddard Space Flight Centre in Greenbelt, Maryland. He ran outreach programmes, which included enabling native Indians to get trained in specific areas of expertise so they could get positions at NASA in order to meet a White House requirement on minorities.

The area that he specialised in – formal methods – consisted of utilising mathematics to show how systems could work on unmanned missions such as telescopes and satellites. Prof Hinchey is the founding editor-in-chief of the NASA journal *Innovations in Systems and Software Engineering*, launched in 2005. In 2009, he was awarded NASA's Kerley Award as Innovator of the Year and is recognized in the NASA Inventors Hall of Fame. He continues to serve as a NASA expert, remaining a consultant to NASA to this day.

## **2.3 IFIP**

In 2016, Prof Hinchey took over as president of the IFIP, the International Federation for Information Processing. He was elected in 2015 at the IFIP's 2015 General Assembly after the World Computer Congress (WCC 2015) in South Korea. He took over in 2016 and wasted no time in getting to work on his many goals as president. His work included improving the profile of IFIP and its countless achievements by improving relationships with other industry bodies, governments and international agencies like the United Nations. Prof Hinchley was re-elected to serve another term as president in 2018, a testament to the fantastic work that he did as president of the IFIP.

## 2.4 Other Work

Prof Hinchey also served as Director of Lero, known as the Irish Software Research Centre. He returned to Limerick from America for personal reasons alongside professional reasons. On one hand his family was living in Limerick, which influenced his decision. Also the area of autonomic or grid computing ( the area in which he wanted to work ) was the area Lero was working on, as well as the mathematical foundations of software engineering.

As well as all of his commercial work, he is the author/editor of more than 15 books and over 200 articles on various aspects of Software Engineering. Throughout his career Hinchey held positions as a Full Professor in Australia, UK, Sweden and USA. Not only this, but he is a Chartered Engineer, Chartered Engineering Professional, Chartered Mathematician and Chartered Information Technology Professional.

## 3 Discussion

Personally, I think that Prof Hinchey is an extremely influential figure in the software engineering world, especially in Ireland. I think that his impressive education, alongside the many achievements and extensive work that he has done in the field of software engineering is something to aspire to for any young computer scientist that is studying this subject.

It is very inspiring for me to see this, an Irishman over in the USA working at NASA as the leader of software engineering helping with space exploration.

## 4 Sources

Mike Hinchey at Lero

<https://www.lero.ie/people/mike-hinchey>

Information about Mike Hinchey

<https://peoplepill.com/people/michael-hinchey/>

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