# Prof. Vinny Cahill BA (mod), MSc, PhD, FTCD Dean of the Faculty of Engineering, Mathematics and Science and

# Professor of Computer Science Trinity College Dublin, The University of Dublin

As Dean of the Faculty of Engineering, Mathematics and Science, Prof. Cahill has responsibility for facilitating new synergies in the delivery of education across the Faculty, for enhancing the learning experience of each of its students, and for fostering an inclusive academic community with equality of access for all. Prof. Cahill is equally committed to ensuring that research in the Faculty is of the highest standard, delivering internationally competitive research through both academic and industrial collaboration, while building on past achievements and established strengths. In partnership with national and international leaders, the Dean ensures that the Faculty is actively engaged in tackling some of the major challenges of today and tomorrow. Prof. Cahill is also responsible for managing the financial, staffing and strategic direction of the Faculty. He combines his role as Dean with teaching and research in the field of distributed computing systems.

#### Career to date

| 2015 – present | Dean of Faculty of Engineering, Mathematics and Science.                               |
|----------------|--|
| 2011 – 2015    | Dean and Vice President for Research.  |
| 2011 – present | Science Foundation Ireland Investigator.   |
| 2009 – 2011    | Head of the Discipline of Computer Systems.  |
| 2008 – 2009    | Head of the Department of Computer Science.  |
| 2006 – 2010    | Director of Research, School of Computer Science & Statistics.                         |
| 2005 – present | Professor of Computer Science (Personal Chair), Trinity College Dublin.                |
| 2003 – 2007    | Science Foundation Ireland Investigator.   |
| 2002 – 2006    | Director of Teaching and Learning (Postgrad), School of Computer Science & Statistics. |
| 2002 – 2005    | Associate Professor of Computer Science, Trinity College Dublin.                       |
| 1996 – 2006    | Head of Distributed Systems Group, Department of Computer Science.                     |
| 1999           | Elected to Fellowship of Trinity College Dublin.                                       |
| 1989 – 2002    | Lecturer in Computer Science, Trinity College Dublin.                                  |
| 1988 – 1989    | Research Assistant, Department of Computer Science, Trinity College Dublin.            |

# **Company Directorships**

| 1991 – 1992 | Director/Company Secretary, Iona Technologies Ltd.                 |
|-------------|--|
| 2011 – 2015 | Molecular Medicine Ireland   |
| 2011 – 2015 | National Institute for Bioprocessing Research and Training (NIBRT) |

2012 – 2015 Science Gallery International Ltd.

2013 – 2015 HEANet Ltd.

## **University leadership**

As Dean and Vice President for Research at Trinity College Dublin for four years, Prof. Cahill had responsibility for coordinating and overseeing the University's research, innovation, technology transfer, and entrepreneurship strategies. In this role he represented the full spectrum of research in the University within the National and International academic and research communities and with diverse stakeholders including Governments, funding agencies and the public.

Prof. Cahill has been a particular champion of multidisciplinary research embracing collaboration between colleagues from the arts, humanities, social sciences, engineering, science and health sciences. He coordinated the development of Trinity's research strategy around the identification and development of a set of research 'themes' characterized by the existence of a critical mass of scholars within Trinity who are working collaboratively in these fields and which have the potential for significant research achievements as well as economic, social and/or cultural impact. These themes range from those address emerging societal challenges including ageing, urbanization and sustainability to those addressing broad areas of research including immunology and infection, creative arts practice, or manuscript, book & print cultures.

He was a principal architect of Trinity's strategy for Innovation and Entrepreneurship which is founded on an approach to education and research that is intend to allow creativity and innovation to flourish in the University while recognizing the many guises under which innovation and entrepreneurship may appear (for example scientific, technological, commercial, social, creative, and/or cultural).

Prof. Cahill also oversaw the implementation of a new framework for promotion of good research practice, including a new system of governance for research ethics approval and promotion of research integrity, within the University. He has also led the successful implementation of the University's research funding diversification and industry engagement strategies.

#### Research leadership

Prof. Cahill's research activities address many aspects of distributed systems, in particular, middleware and programming models for ubiquitous and mobile computing with application to smart cities and intelligent transportation systems. In the past, he worked extensively on middleware and programming models for distributed object computing.

His research has led to contributions in a number of areas including distributed systems, distributed object computing, middleware, reflection, and mobile and ubiquitous computing. His early research activities contributed to the formation of a successful campus company, Iona Technologies, in the area of distributed object computing. These and subsequent research activities have produced a number of innovative software systems as well as over 150 peer-reviewed publications including books, journal articles, conference-associated publications and book chapters. He has been invited to serve as guest

co-editor for special issues of three international journals, editorial board member of two international journals, and as co-chair or member of the programme committees of a number of highly-regarded international conferences, symposia, and workshops.

Prof. Cahill led the Distributed Systems Group (DSG) in the Department of Computer Science between 1996 and 2006 when he took over the role of Director of Research for the School of Computer Science & Statistics. As Director of Research for Computer Science & Statistics in Trinity College, Prof. Cahill was responsible for research strategy for one of largest Schools in the College representing about 8% of the College's academic staff. Prof. Cahill was responsible for significant reorganisation of the School's activity to promote greater engagement in research including the creation of five new departments within the School.

## **Innovation/Commercialization Activity**

Prof. Cahill was a co-founder of one of Ireland's most successful indigenous software companies, which started as a campus company building on the research experience of DSG to develop products in the area of distributed object technology.

Prof. Cahill was also a proposer of and Trinity College representative on the executive committee of the National Digital Research Centre (NDRC) - a publically funded research centre founded by a consortium of Dublin-based third level institutions to undertake translational research bridging the gap between the results of basic science and their exploitation for societal benefit.

#### **Teaching**

During his career to date, Prof. Cahill has taught a variety of courses in Computer Science at all levels ranging from Junior Freshman to postgraduate (M.Sc.) students. All of his teaching emphasises understanding of the fundamental principles of the subject coupled with development of the analytical skills necessary to be able to apply these principles to practical problems in Computer Science.

Prof. Cahill was the first Director of Postgraduate Teaching for the Department of Computer Science and subsequently the first Director of Teaching and Learning (Postgraduate) for the School of Computer Science and Statistics. He was founding course director for two highly successful taught MSc programmes in Networks and Distributed Systems (1998) and in Mobile and Ubiquitous Computing (2003).

Prof. Cahill has supervised 35 completed PhD theses and 11 MSc theses by research to date as well as many MSc dissertations.