

# The 2019 VGTC Virtual Reality Career Award



## Mark Billinghamurst

The 2019 Virtual Reality Career Award goes to Mark Billinghamurst in recognition of his lifetime contributions to human-computer interaction for augmented and virtual reality. Professor Billinghamurst has been working in Virtual and Augmented Reality for over 25 years. As a PhD student he helped develop the ARToolKit library, the first open-source AR tracking library that brought AR into the hands of millions of developers and end users, and created some of the first collaborative AR experiences. He also started ARToolWorks, the first AR tools company, which helped grow the early AR industry. Following his PhD he was founding Director of the HIT Lab NZ at the University of Canterbury, which grew into the largest academic AR/VR research group in the Southern Hemisphere, and was responsible for the first collaborative mobile phone AR experience, first mobile AR advertising campaign, the first AR colouring books, and many other innovations. He has trained dozens of Masters and PhD students and his innovations inspired many more globally. He was awarded the 2013 IEEE VGTC Virtual Reality Technical Achievement Award. The IEEE VGTC is pleased to award Mark Billinghamurst the 2019 Virtual Reality Career Award.



**Mark Billinghamurst**

University of South Australia  
Award Recipient 2019

Mark Billinghamurst is Professor of Human Computer Interaction at the University of South Australia in Adelaide, Australia, and Professor in the Bio-Engineering Institute at the University of Auckland in New Zealand. He is Director of the Empathic Computing Laboratory across both locations where he is exploring how AR/VR, physiological sensors and wearable devices can be used to create new types of collaborative experiences that can increase understanding and empathy between remote people. He has worked for over twenty five years on developing innovative computer interfaces that explore how virtual and real worlds can be merged, publishing over 400 research papers on topics such as wearable computing, Augmented Reality, Virtual Reality, multi-modal interfaces and collaborative systems.

Billinghamurst published his first VR paper at IEEE VR and since then has presented his and his team's work many times at the conference. He has received many awards for his research, including the 2001 Discover award from Discover Magazine in the Entertainment category for the MagicBook interface, the 2006 World Class New Zealand Award (ICT Category) for services to ICT industry, 2006 International Mobile Gaming Awards Grand Prix Winner for the AR Tennis mobile AR game, and 2007 Adweek Buzz Awards for Best Print Campaign for the Wellington Zoo mobile AR campaign. In 2012 he was awarded the IEEE ISMAR Lasting Impact Award for the most influential paper published at the ISMAR conference in the previous 10 years. In 2013 he was elected as a Fellow of the Royal Society of New Zealand in recognizing of his work in AR research and commercialization. He was given the 2018 Research Excellence award from the Division of ITEE at the University of South Australia.

After trying several majors, Billinghamurst completed Honors and Master's degrees in Applied Mathematics from the University

of Waikato in New Zealand. He then went to complete a PhD at the Human Interface Technology Laboratory (HIT Lab) at the University of Washington, under the supervision of VR pioneer, Professor Tom Furness III, where he published the first thesis on collaborative AR. In 2002 he returned to NZ to start the HIT Lab NZ at the University of Canterbury, which he ran for 13 years. In 2015 he joined the University of South Australia, and in 2018 returned to NZ to take a part time position at the Auckland BioEngineering Institute at the University of Auckland. In addition to his academic work he has worked in industry at British Telecom, Nokia, Google and is currently an Amazon Scholar. He has founded two AR companies and was also founding partner in the SuperVentures AR/VR venture capital fund.

## AWARD INFORMATION

The IEEE VGTC Virtual Reality Career Award was established in 2005. It is given every year to an individual to honor that person's lifetime contributions to virtual & augmented reality. VGTC members may nominate individuals for the Virtual Reality Career Award by contacting the awards chair, Henry Fuchs, at [vgtc-vr-awards@vgtc.org](mailto:vgtc-vr-awards@vgtc.org).