

# Spatial User Interaction Panel

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## CCS CONCEPTS

• **Human-centered computing** → **Interaction paradigms**;

## KEYWORDS

Human-computer interaction; 3D interaction; Mixed Reality;

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## 1 INTRODUCTION

In this panel, we will discuss the current state of Spatial User Interfaces (SUI), and the new research challenges that await us. The discussion will start on the topic of field studies, and practical applications of SUI technologies in the wild. Most current research focuses on controlled settings, therefore exploring how these technologies can be applied outside laboratories will be of particular relevance.

## 2 FLORIAN DAIBER (MODERATOR)

Florian Daiber, is a post-doctoral researcher at the Innovative Retail Laboratory (IRL) at the German Research Center for Artificial Intelligence (DFKI) in Saarbrücken, Germany. His main research is in the field of human-computer interaction, 3D user interfaces and ubiquitous sports technologies. Florian is currently involved in projects on affective lighting in retail environments, 3D interaction with stereoscopic displays, mobile augmented reality and wearable sports technologies.

## 3 KYLE JOHNSEN

Kyle Johnsen is an Associate Professor in the School of Electrical and Computer Engineering at the University of Georgia. His highly interdisciplinary applied research is in the design and evaluation of novel human-computer systems, particularly those that involve

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ubiquitous computing, intelligent agents, and virtual reality, that address societal problems. Examples include the Marine Debris Tracker App ([marinedebris.engr.uga.edu](http://marinedebris.engr.uga.edu)), Virtual STEM Buddies exhibit at the Children's Museum of Atlanta, and medical training tool, [nervesim.com](http://nervesim.com). In 2017, he became the founding director of the Georgia Informatics Institutes for Research and Education, which is leading advancement of computational tools across disciplines, and includes faculty members from over half of the Colleges at the University of Georgia.

## 4 ROBERT W. LINDEMAN

Rob Lindeman has been doing research in the field of Virtual Reality since 1993. His work focuses on immersive, multi-sensorial feedback systems for VR, AR, and gaming, as well as natural and non-fatiguing interaction. He is Professor of HCI at the Human Interface Technology Lab New Zealand (HIT Lab NZ) at the University of Canterbury. Prior to that, Rob was in the CS Department at Worcester Polytechnic Institute (WPI) in the USA and director of WPI's Interactive Media & Game Development programme. Rob holds a BA from Brandeis University (USA), an MS from the University of Southern California (USA), and an ScD from the George Washington University (USA). Rob is a Senior Member of the IEEE and ACM. He is an avid geocacher, mountain biker, skier, and soccer player.

## 5 SRIRAM SUBRAMANIAN

Sriram Subramanian is a Professor of Informatics at the University of Sussex where he leads the Interact Lab ([www.interact-lab.com](http://www.interact-lab.com)). Before joining Sussex, he was a Professor of Human-computer Interaction at the University of Bristol and prior to this a senior scientist at Philips Research Netherlands. He has published over 100 research articles on designing new and novel user-experiences through a combination of physical science, engineering and creativity. He has received research funding from EPSRC (Responsive mode), ERC (Starting Grant and PoC), EU (FET-open) and industry. He is also the co-founder of Ultrahaptics ([www.ultrahaptics.com](http://www.ultrahaptics.com)) a spin-out company that aims to commercialise the mid-air haptics.