Visual Computing Colloquium June 13th, 2018, 4PM

Taking AR to Task: **Explaining Where** and How in the **Real World**

Prof. Steven K. Feiner Columbia University

Wednesday, June 13th, 2018, 4 pm **Meeting Room C061**

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Vita:

Steven Feiner is a Professor of Computer Science at Columbia University, where he directs the Computer Graphics and User Interfaces Lab. His lab has been conducting virtual reality (VR), augmented reality (AR), and wearable computing research for over 25 years, designing and evaluating novel 3D interaction and visualization techniques, creating the first outdoor mobile AR system using a see-through head-worn display and GPS, and pioneering applications of AR to fields as diverse as tourism and maintenance. He received an A.B. in Music and a Ph.D. in Computer Science, both from Brown University. Prof. Feiner is an IEEE Fellow and member of the CHI Academy, and received the ACM SIGCHI 2018 Lifetime Research Award, the IEEE ISMAR 2017 Career Impact Award, and the IEEE VGTC 2014 Virtual Reality Career Award. He and his students have won the ISWC 2017 Early Innovator Award, the ACM UIST 2010 Lasting Impact Award, and best paper awards at ACM UIST. ACM CHI, ACM VRST, IEEE ISMAR, and IEEE 3DUI. Prof. Feiner has served as general chair or program chair for over a dozen ACM and IEEE conferences and is coauthor of two editions of Computer Graphics: Principles and Practice. He is lead advisor to Meta, the AR company.

Researchers have been actively exploring Augmented Reality (AR) and Virtual Reality (VR) for a half century, first in the lab and later in the streets. Over the past few years, however, VR head-worn display developer kits have metamorphosed into early consumer products that are far superior to what most VR researchers previously had available. And compelling AR headworn display developer kits have now been released that promise to beget everyday see-through eyewear. What can the upcoming generation of consumer AR make possible by interactively integrating virtual media with our experience of the physical world? I will try to answer this question in part by presenting some of the research being done by Columbia's Computer Graphics and User Interfaces Lab to explore how we can support users in performing skilled tasks. Examples I will discuss range from providing standalone assistance, to enabling collaboration between a remote expert and a local user. I will address infrastructure spanning the gamut from lightweight, monoscopic eyewear, to hybrid user interfaces that synergistically combine tracked, stereoscopic, see-through head-worn displays with other displays and interaction devices.

Kontakt:

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