

UCSD NANOENGINEERING/CHEMICAL ENGINEERING SEMINAR SERIES Wednesday, November 1st, 2023 Seminar Presentation: 11:00am - 12:00pm SME room 248

"Haptics - Multiphysics Science and Engineering for the Sense of Touch"

Dr. Yon Visell, PhD

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Abstract: Yon Visell will discuss research in the RE Touch Lab (www.re-touch-lab) at UC Santa Barbara. Their research addresses longstanding challenges in haptics, including the scientific understanding of the sense of touch, and the engineering of haptic display technologies - analogs of video displays for the sense of touch. He will describe the origins of these challenges in human perception, in physics at multiple length and time scales, and in device engineering. Visell will show how their research group is addressing engineering challenges in haptics by characterizing and exploiting physical mechanisms of energy transport, through computational tools, and through the engineering of new material systems and technologies.

Biosketch: Yon Visell is Associate Professor at the University of California, Santa Barbara, where he is appointed in the Bioengineering and Mechanical Engineering Departments. He received the Ph.D. in Electrical and Computer Engineering at McGill University, and was a postdoctoral scholar at Sorbonne University, Paris. He received MA and BA degrees in physics from The University of Texas, Austin and Wesleyan University, respectively. Prior to his PhD studies, Visell spent several years in industry R&D. Visell has published more than 75 scientific works. He is the receipient of an NSF CAREER Award, a Google Faculty Research Award, Hellman Faculty Fellowship, and multiple awards at academic conferences. His research interests include haptic perception and engineering, soft robotics, and emerging material technologies.