

# University of Houston - Biomedical Engineering Seminar

Friday, October 22, 2021, 12 noon

Via Zoom: <https://uh-edu-cougarnet.zoom.us/j/93512038041>

## Sensorimotor Control of Dexterous Manipulation Across the Lifespan



**Pranav Parikh, Ph.D.**

### Abstract

The ability to perform skilled object manipulation - a hallmark of human evolution - relies on the use of sensory feedback to adjust digit forces to task requirements. Dr. Parikh will present his research work that provided novel insights concerning the neural mechanisms underlying dexterous manipulation. These mechanisms were uncovered by combining non-invasive brain stimulation such as Transcranial Magnetic Stimulation and validated behavioral paradigms. Next, he will discuss how healthy aging might influence these sensorimotor mechanisms. Finally, he will showcase how knowledge and understanding gained from his own research led him to create a novel tool to assess manual dexterity in children.

### Biosketch

Dr. Parikh is an associate professor in the department of Health and Human Performance at this institution. He is the Director of Center for Neuromotor and Biomechanics Research. Dr. Parikh and his team perform research to further our knowledge about the role of human brain in movement control and in learning new movement skills.

Dr. Parikh received his PhD degree in Human Motor Control/Neuroscience from the University of Iowa. From 2012 to 2015, Dr. Parikh worked as a Postdoctoral Scholar in the School of Biological and Health Systems Engineering at Arizona State University. He has been with the University of Houston since 2015. Dr. Parikh is also a faculty member of the NSF IUCRC BRAIN University of Houston Site.