SEMINAR SERIES

Supported by The Department of Biomechanics and
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PERSPECTIVES ON ENGINEERING HUMAN MOTION

Featuring Dr. Carl Nelson

University of Nebraska-Lincoln

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September 6, 2019 | 12:00 - 1:15 pm | H&K 112

Parking Available in Lot T

ABSTRACT

As our ability to treat disease and otherwise care for and extend the life of the human body increases, the need for technologies to support this paradigm will continue to evolve and increase. Many of these technologies will necessarily involve physical human-device interactions, including biomechanical interactions (e.g., to promote healthy levels of activity, relearn healthy motion patterns after injury/illness, and enhance motor development). This talk will provide an overview of several research and development examples in this area, and draw general conclusions on key considerations for linking engineering principles with biomechanics principles in support of technology development.

ABOUT DR. NELSON

Dr. Nelson joined the faculty of the Department of Mechanical Engineering in 2005. Prior to coming to UNL, he attended Purdue University, where he received an NSF Graduate Research Fellowship and completed his MSME and PhD degrees. Dr. Nelson is a member of the ASME, and his teaching experience includes courses in flight science at Johns Hopkins University's Center for Talented Youth and algebra at Ivy Tech State College of Indiana. Since coming to UNL, Dr. Nelson has taught Dynamic Systems Modeling and Control (MECH 350), Biomedical Device Design (MECH 437/837), Mechanical Engineering Design I (MECH 446), and Kinematics and Dynamics of Machinery (MECH 342).

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