Department of Industrial, Systems, and Manufacturing Engineering
Seminar Presentation

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Title: Acquiring knowledge from sensor data
Date: Friday – March 29, 2019
Time: 11:00 am – 12:00 noon
Location: Engineering Building (EB) Room 211

Abstract
Acquiring meaningful information from sensor data requires in-depth understanding of physical
phenomena measured by sensors. A sensor captures a time series that exhibits signals of static and
dynamic phenomena. Extracting a useful signal from the time series becomes a challenge if the
time series contains multiple signals coupled with electrical or mechanical noises
 and
artificial neural networks for acquiring knowledge from various sensor data. The discussion
consists a lower
-pair
kinematic chain. The second part deals with the use of discrete Fourier transform and artificial
neural networks for acquiring the process dynamics and its characteristics from force feedback
sensor data captured during a friction stir welding process.

Speaker Biography
Enkhsaikhan Boldsaikhan received his B.S. degree in Computer
Science from Mongolian University of Science and Technology, in
Ulaanbaatar, Mongolia. He earned his M.S. degree in Computer
Science and the Ph.D. degree in Materials Engineering and Science
from South Dakota School of Mines and Technology, in Rapid City,
SD, USA. He was a research scientist/engineer at National Institute
for Aviation Research. He is now an assistant professor in the
Department of Industrial, Systems, and Manufacturing Engineering
at Wichita State University. His research interests include smart
manufacturing, automation, industrial robotics, friction stir welding,
and cyber-physical systems. He teaches industrial robotics and automation courses.