FACULTY SEMINAR

High-tech and Low-tech Ergonomics Innovations in Industrial Engineering

Date: May 19th, 2025, 12:15 - 14:00

Place: Narbutta 85, NT144

Moderators: prof. Krzysztof Santarek & dr Aneta Kossobudzka-Gorska, Eur.Erg.

"Physical Ergonomics in the Age of Artificial Intelligence" Prof. Denny Yu, CPE, Purdue University



Al-driven ergonomic risk assessment leverages machine learning, computer vision, and wearables to enhance prediction and monitoring. The talk examines sensor-based approaches for quantifying risk factors in manual handling and healthcare tasks.

Associate Professor of Industrial Engineering at Purdue University.

Adjunct Associate Professor of Surgery at Indiana University School of Medicine.

- https://engineering.purdue.edu/IE/people/ptProfile?resource id=134078
- https://www.scopus.com/authid/detail.uri?authorld=55190007200

Research Focus:

Human factors engineering in the area of biobehavioral sensing techniques for human state modeling in high-stress, dynamic healthcare environments.

"A practical low-cost process for workplace ergonomics improvements" Dan MacLeod, CPE ret., MA, MPH

A low-cost ergonomic improvement process empowers teams to apply ergonomic principles with minimal resources, yielding reduced overuse injuries, lower costs, and higher efficiency. The approach supports scalable, low-tech innovation.



Ergonomics consultant.

Masters in occupational health, and industrial relations.

https://www.danmacleod.com/home.html

Research focus:

Practical human-centered design for low-cost, team-driven ergonomic solutions across diverse industries. Over 1500 on-site evaluations. Specializes in workplace problem-solving, ergonomic tool design, and hands-on innovation enablement.





