

PEER-REVIEWED JOURNAL PAPERS [Google Scholar]

6. [H.O. Demirel](#) and V.G. Duffy, “[Building quality into design process through Digital Human Modeling](#)”, *International Journal of the Digital Human (In Print)*, X-X (2016).
5. [H.O. Demirel](#), L. Zhang, and V.G. Duffy, “[Opportunities for meeting sustainability objectives](#)”, *International Journal of Industrial Ergonomics* **51**, 73-81 (2016).
4. [H.O. Demirel](#) and V.G. Duffy, “[A sustainable human centered design framework based on human factors](#)”, *Lecture Notes in Computer Science, Digital Human Modeling and Applications in Health, Safety, Ergonomics, and Risk Management. Healthcare and Safety of the Environment and Transport* **8025**, 307-315 (2013).
3. [H.O. Demirel](#) and V.G. Duffy, “[Impact of force feedback on computer aided ergonomic analyses.](#)”, *Lecture Notes in Computer Science, Digital Human Modeling* **5620**, 608-613 (2009).
2. [H.O. Demirel](#) and V.G. Duffy, “[Digital human modeling for product lifecycle management.](#)”, *Lecture Notes in Computer Science, Digital Human Modeling* **4561**, 372-381 (2007).
1. [H.O. Demirel](#) and V. G. Duffy, “[Applications of digital human modeling in industry.](#)”, *Lecture Notes in Computer Science, Digital Human Modeling* **4561**, 824-832 (2007).

BOOK(S) AND BOOK CHAPTERS

2. [H.O. Demirel](#) and V. G. Duffy. “[Appendix D: Ergonomics Software Sources.](#)”, *Occupational Ergonomics: Theory and Applications* (CRC Press, 2012), A. Bhattacharya & J. D. McGlothlin, eds.
1. [H.O. Demirel](#) “[User Manual and Examples: Tecnomatix Jack 5.0.](#)”, *The Handbook of Digital Human Modeling: Research for Applied Ergonomics and Human Factors Engineering* (CRC Press, 2008), V. G. Duffy, ed.

PEER-REVIEWED CONFERENCES AND PROCEEDINGS

3. H. Tong, L. Zhang, [H.O. Demirel](#) B.C. Lee, Y. Yih, B. Bidassie, and V.G. Duffy, “Value co-creation in healthcare service systems”, *Proceedings of AHFE 2015, the 6th International Conference on Applied Human Factors and Ergonomics.* , (2015).
2. [H.O. Demirel](#) V. Balchandani, N.W. Hartman, A. Lowe, V.G. Duffy and H. Rozali, “Proof of concept for test of virtual assembly cell with high product complexity.”, *Proceedings of AHFEI 2008, the 2nd International Conference on Applied Human Factors and Ergonomics* , (2008).
1. [H.O. Demirel](#) and V.G. Duffy, “RFID for medical implant monitoring and positive patient identification.”, *Proceedings of AHFEI 2008, the 2nd International Conference on Applied Human Factors and Ergonomics* , (2008).

PRESENTATIONS AND SEMINARS

6. H.O. Demirel, “*Human-in-the-loop Design Framework*”, Graduate Design Seminar Oregon State University, Corvallis, OR – 1/22/16
5. H.O. Demirel, “*Digital Human Modeling for product design and development*”, Whirlpool Co. Benton Harbor, MI – June, 2010
4. H.O. Demirel, “*Impact of Force Feedback on Computer Aided Ergonomic Analyses*”, International Conference on Human-Computer Interaction San Diego, CA – July, 2009
3. H.O. Demirel, “*RDIF for Medical Implant Monitoring*”, International Conference on Applied Human Factors and Ergonomics Las Vegas, NV – Jun., 2008
2. H.O. Demirel, “*Applications of Digital Human Modeling in Industry*”, International Conference on Digital Human Modeling Beijing, China – July, 2007
1. H.O. Demirel, “*Digital human modeling for product life-cycle management*”, International Conference on Digital Human Modeling Beijing, China – July, 2007

THESES SUPERVISED

1. Kamolnat Tabattanon – MS – [Feb. 2016 - today]
2. Alex Jennings – MS – [Feb. 2016 - today]

HONORS AND AWARDS

Purdue University, School Industrial Engineering:

- 2015 Teaching Academy Graduate Teaching Award
- 2014 Graduate School Summer Research Fellowship
- 2012 Graduate School Summer Research Fellowship
- 2006 Alpha Pi Mu National Industrial Engineering Honor Society
- 2006 Completed Industrial Engineering Honors Program

TEACHING

Oregon State University, School of Mechanical, Industrial and Manufacturing Engineering:

- **ENGR248 Engineering Graphics and 3D Modeling:** Winter 16
Course Description: Introduction to graphical communication theory, including freehand sketching techniques, geometric construction, multi-view, pictorial, sectional and auxiliary view representation and dimensioning techniques. Practical application of theoretical concepts using solid modeling software to capture design intent and generate engineering drawings.
Enrollment: 319
Student Rating: N/A

Purdue University, School Industrial Engineering:

- **IE558 Safety Engineering:** Spring 13

Course Description: Application of human factors and engineering practice in accident prevention and the reduction of health hazards are presented. The objective of this course is to provide an understanding of the safety and health practices which fall within the responsibilities of the engineer in industry. Special attention is devoted to the detection and correction of hazards and to contemporary laws and enforcement on occupational safety and health.

Enrollment: \simeq 110

Student Rating: 4.4/5.0

- **IE386 Work Analysis and Design - I:** Spring 2011,2013,2014

Course Description: Fundamentals of work methods and measurement. Applications of engineering, psychological, and physiological principles to the analysis and design of human work systems. Lectures and laboratory sessions include designing and analyzing workstation through Catia V5 and JACK software.

Enrollment: \simeq 135

Student Rating: 4.4/5.0

- **Applied Ergonomics:** Spring 2011

Course Description: Upon completion of this course, students will be able to perform specific types of ergonomic analyses as well as design jobs and systems consistent with human factors engineering principles. Topics covered are: anthropometrics, work physiology, methods analysis, lifting analysis, learning, time studies, synthetic data systems, activity sampling, sampling methods, process mapping, basic concepts in cognition, decision-making, task/workload, situation awareness, function allocation, supervisory control, performance modeling, human error analysis, human-computer interaction principles.

Enrollment: \simeq 35

Student Rating: 4.0/5.0

TECHNICAL SKILLS

Computer Aided Design: Catia V5, SolidWorks, Autodesk Inventor

Computer Aided Engineering: JACK, 3DSSPP, Ansys, SimScale, OpenSim, Comsol

Data Analysis: SPSS, DataGraph, LabView, Matlab, Mathematica

Technical Drawing: OmniGraffle, SmartDraw, Microsoft Visio, ConceptDraw

Digital Drawing: SketchBook Pro, SketchBook Designer, Adobe Photoshop, Adobe Illustrator

Press and Publication: MS Office, OS Productivity, Adobe InDesign, Mendeley, L^AT_EX

Hardware: Motion capture, pressure sensors, haptic devices, virtual reality, eye-tracking, lumbar motion monitor, driving and flight simulators