

## **Gene H. Lee, Ph.D., PE, CMSP**

Department of Industrial Engineering & Management Systems  
University of Central Florida  
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### **EDUCATION**

Ph.D. (Industrial Engineering)	Texas Tech University, May 1985
M.S. (Industrial Engineering)	Texas Tech University, December 1981
M.S. (Engineering Adm.)	St. Mary's University, December 1979
B.E. (Civil Engineering)	Kyung-Hee University, February, 1975

### **EXPERIENCE**

Associate Professor: 1985 - Present, Industrial Engineering & Management Systems, University of Central Florida  
Research Engineer: 1991 - 1992, Naval Training & Systems Center (U.S. Dept. of Defense)  
Research Assistant: 1981 - 1984, Department of Industrial Engineering, Texas Tech University  
Civil Engineer: 1976-1978, Dong-A Construction Co., Seoul, Korea

### **SPONSORED RESEARCH**

"Development of an Analytical Model to Determine the Allowable Exposure Time Limits to Hot Environment", funded by EIES, \$10,000, (1985-86), PI.  
"Personnel Reliability Analysis Techniques for Space Operations", funded by EIES/NASA (KSC), \$45,000, (1985-86), Co-PI.  
"Ergonomics/Human Factors in Simulation and Training", funded by Institute for Simulation and Training, \$14,000, (1986-87), PI.  
"Intelligent Simulation Training Systems", funded by the State of Florida, \$ 51,882, (1986-88), PI.  
"ASTAR: Operational Evaluation and Implementation", funded by the Naval Training & Systems Center, \$264,000, (1989-90), Co-PI.  
"Productivity Improvement Techniques", funded by NASA (KSC), \$276,838, (1989-91), Co- PI.  
"TravTek Evaluation", funded by the Federal Highway Administration (DOT), subcontract through SAIC, \$167,000, (1992-93), PI.  
"Simulation Sickness", funded by the Naval Training & Systems Center, \$30,000, (1994-95 ), PI.  
"Relationship Between Postural Control and Simulator Sickness", funded by Naval Air Warfare Center-Training Systems Division, \$10,000, (1995- 98), PI.

- “Enhanced Biological and Chemical Isolation Suit for Bio-terrorism Response”, \$233,589 (2002-03), funded by U.S. DoD, PI.
- “Developing M&S Instruction for ROK-ADD”, \$260,000 (2010-2011), funded by the Boeing Company, PI.
- “An interoperability technology for LVC components and its prototype in the component-based simulation environment (AddSIM)”, \$520,000 (2014-2015), funded by the Korea Agency for Defense Development (ADD), PI
- “Developing M&S instruction for ROK-ADD Phase II”, \$150,000, (2014-2015), funded by the Boeing Co., PI
- “MRM in Weapon System Effectiveness”, \$30,000, (2017-2018), funded by Ares Co., LTD, PI
- “Research on Implementation Issues in Multi-Resolution Combat Modeling”, \$167,000, (2017-2019), funded by RealTimeVisual, Inc., PI

## **TEACHING AND RESEARCH INTERESTS**

Modeling and Simulation  
Ergonomics/Human Factors, Systems Safety Engineering

## **PUBLICATIONS**

- Cortes, E., Rabelo, L. and Lee, G., Using Deep Learning to Configure Parallel Distributed Discrete-Event Simulators. In: L. Rabelo (Ed). Artificial Intelligence: Advances in Research and Applications. Nova Science Publishers, Inc. Commack, NY, USA ©2018 - ISBN:1536126772 9781536126778.
- Jung, W., Lowe, L., Rabelo, L., Lee, G., "A Methodology on Guiding Effectiveness-Focused Training of the Weapon Operator Using Big Data and VC Simulations," SAE Int. J. Aerosp. 10(2):57-67, 2017, <https://doi.org/10.4271/2017-01-2018>
- Jung, W., Lowe, L., Rabelo+, L., Lee+, G., "A Methodology on Guiding Effectiveness-Focused Training of the Weapon Operator Using Big Data and VC Simulations," SAE AeroTech Conference Proceedings, Fort Worth, Texas, 2017.
- Jung, Won Il, Rabelo, Luis, Lee, G.H., “Weapon Effectiveness Analysis Using Virtual and Constructive Simulation and Big Data”, 2016 ISERC, May 2016
- Jung, Won Il, Rabelo, Luis, Lee, G.H., “A Study on the Operations Analysis Using Big-Data Developed by Simulation”, INFORMS 2016, November 2016
- Park, T., Kim, K., Rabelo, L., Lee, G.H., “An Agile Roadmap for LVC-IA: A Case Study using a Component based Integrated Simulation Engine (AddSIM)”, Proceedings of 2015 MODSIM World
- Kim, K., Park, T. Rabelo, L., Lee, G.H., “A LVC Simulation Interoperability Measurement Framework”, Proceedings of the 2015 MODSIM World
- Kim, K. Park, T. Pastrana, J, Marin, M, Cortes, E., Rabelo, L., Lee, G.H., “Modeling of Complex Scenarios Using LVC Simulation” Proceedings of the 2014 Winter Simulation Conference

- Cakit, Erma, Karwowski, Waldemar, Bozkurt, Halil, Ahram, Tareq, Thompson, William, Mikusinski, Piotr, Lee, Gene, "Investigating the relationship between adverse events and infrastructure development in an active war theater using soft computing techniques, Applied Soft Computing, 2014
- Park, T.W., Kim, S.J., Lee, G.H. "A Study of emoticon use in instant messaging from smartphone", Proceedings of the HCI, 2014
- Park, T.W., Lee, G.H., Kim, Kiyoul, "A study on the methodology of cost-effectiveness analysis for a helicopter simulator acquisition project" Proceedings of the 2014 Industrial and Systems Engineering Research Conference
- Kim, Kiyoul, Park, T.W., Riad, Rana, Bhide, Sayli, Joledo, O., Pastrana, John, Marin, Mario, Lowe, Larry, Rabelo, Luis, Lee, G. H. "Test-bed using the high-level architecture and other distributed-simulation frameworks" Proceedings of the 2014 Industrial and Systems Engineering Research Conference
- Lee, G. H. "Effects of Personal Protective Clothing on Functional Anthropometry", Proceedings of the IEA Conference, August 2009
- Lee, G.H. "Assessment of the Biological/Chemical Isolation Suit, Proceedings of the ISOES'08 Annual Conference, June 2008
- Lee, G.H. and Kim, J.W., "Evaluating the Restricted Mobility and Reduced Dexterity of the First Responders While Wearing Personal Protective Clothing (PPC), Proceedings of the ISOES'05 Annual Conference, June 2005
- Lee, G.H. and Kim, J.W., "Evaluating the Reduced Dexterity if the First Responders While Wearing Personal Protective Clothing and Gloves", Proceedings of the 8<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, November, 2003
- Lee, G.H., and Kim, J.W., "Assessment of Restricted Mobility While Wearing Encapsulating Personal Protective Clothing", Proceedings of the XV<sup>th</sup> Triennial Congress of the International Ergonomics Association, August, 2003
- Lee, G.H., and Kim, J.W., "Ergonomics Considerations of the Biological/Chemical Isolation Suit", Proceedings of the XVI Annual International Occupational Ergonomics and Safety Conference'2002
- Lee, K.B., Lee, G.H. and Yoo, Y.H., "Anthropometry of the Face Area for the Design of Facemask", Advances in Occupational Ergonomics and Safety, IOS Press, 1999
- Lee, G.H. and Yoo, Y.H., "Prediction of Simulator Sickness in a Fixed-Base Simulator", Advances in Occupational Ergonomics and Safety, IOS Press, 1999
- Lee, J.W. and Lee, G.H., "Effects of Aging on Pilot Performance Measured in Response Time During Emergency Situation", Advances in Occupational Ergonomics and Safety, IOS Press, 1999
- Yoo Y.H. and Lee, G.H., "Relationship Between Gender, Vection, and Sickness in Virtual Environments", Proceedings of the Korean-Japanese Joint Human Factors Annual Meeting, 1998
- Lee, G.H., Yoo, Y.H., and Jones, S., "Vection, Compensatory Sway, and Simulator Sickness", Advances in Industrial Ergonomics and Safety IX, Taylor & Francis, 1997
- Lee, G.H., Yoo, Y.H., and Jones, S., "Investigation of Driving Performance, Vection, Postural Sway, and Simulator Sickness in a Fixed-base Driving Simulator", Proceedings of the 20<sup>th</sup> International Conference on Computers & Industrial Engineering, 1996

- Lee, K.B. and Lee, G.H., "Anthropometry of Specific Regions of Face Area", Advances in Industrial Ergonomics and Safety VIII, 1996, Edited by A. Mital, Taylor & Francis Ltd.
- McAlindon, P. and Lee, C.H., "Perceived Workload Between the Keybowl and the Qwerty Keyboard", Proceedings of the Human Factors and Ergonomics Society 39th Annual Meeting, 1995
- Lee, G.H. and Morrison, R.W., "Computerized Modular Automobile Navigation System", Proceedings of the 7th Kia International Academic Seminar, 1994
- Lee, G.H. and Morrison, R.W., "TravTek: System Architecture and Evaluation", Proceedings of the 7th Kia International Academic Seminar, 1994
- Lee, G.H., "The Development of a Simple to Use Occupational Heat Exposure Limits", Proceedings of the 3rd Pan-Pacific Conference on Occupational Ergonomics, 1994
- McAlindon, P. and Lee, G.H., "Development and Evaluation of a New Computer Input Device", Proceedings of the 3rd Pan-Pacific Conference on Occupational Ergonomics, 1994
- Lee, G.H., Jung, N.H., Yoo, Y.H., and Lee, K.B., "Expert Systems for Heat Exposure Limit Determination", Advances in Industrial Ergonomics and Safety VI, June 1994, Edited by F. Aghazadeh, Taylor & Francis Ltd.
- Lee, G.H. and McAlindon, "Ergonomics Evaluation of In-Vehicle Navigation System (IVNS)", Advances in Industrial Ergonomics and Safety V, June 1993, Edited by R. Nielson, Taylor & Francis Ltd.
- Inman, V.W., Fleischman, R.N., Dingus, T.A., and Lee, G.H., "Contribution of Controlled Field Experiments to the Evaluation of TravTek", IVHS AMERICA, April 1993
- Lee, G.H., "Intercomparison of Thermal Indices under Varying Thermal Components", Proceedings, Human Factors Society 35th Annual Meeting, San Francisco, CA, September 1991
- Lee, G.H., Hosni, Y.A., Guthrie, L.L., Barth T., and Hill, C., "Design and Evaluation of a Workseat for Overhead Tasks", Advances in Industrial Ergonomics and Safety III, June 1991, Edited by W. Karwowski, Taylor and Francis Ltd.
- Lee, G.H. and Paz, N.M., "Human-Computer Interfaces: Modeling and Evaluation", Computers & Industrial Engineering - An International Journal, Vol 19, 1991, Edited by H. Eldin, Pergamon Press
- Hosni, Y.A., Lee, G.H., Barth, T, and Hill, C., "Design of a Workstand for Overhead Operations: Case of the Space Shuttle Heat-Tile Replacement", Human Aspects of Hybrid Automated Systems II, August 1990, Elsevier Science Publishers
- Elshennawy, A.K., Lee, G.H., Swart, W.W. and Chandra, S., "Human Engineering Aspects in the Automation of Industrialized Housing", Human Aspects of Hybrid Automated Systems II, August 1990, Elsevier Science Publishers
- Lee, G.H., "Detailed Design of a Simulation Based Intelligent Safety Training System (SISTS)", Advances in Industrial Ergonomics and Safety II, June 1990, Edited by B. Das, Taylor and Francis Ltd.
- Lee, G.H. and Hosni, Y.A., "A Microcomputer Application to Metabolic Workload Estimation", Computers & Industrial Engineering - An International Journal, Vol 18, 1990, Edited by H. Eldin, Pergamon Press
- Lee, G.H. and Shayhkian, G.A., "A Microcomputer Application in Engineering Anthropometry", Computers & Industrial Engineering - An International Journal, Vol. 17, 1989, Edited by H. Eldin, Pergamon Press

- Elshennawy, A.K., Lee, G.H. and Hines, M.E., "Ergonomics Issues in Quality Control", Computers & Industrial Engineering -An International Journal, Vol. 17, 1989, Edited by H. Eldin, Pergamon Press
- Lee, G.H. and J.E. Biegel, "Application of Artificial Intelligence in Safety Training", Computer-Aided Design: Applications in Ergonomics and Safety, 1989, Edited by W. Karwowski, A. Genaidy and S. Asfour, Taylor and Francis Ltd.
- Lee, G.H., "Conceptual Design of a Simulation Based Intelligent Safety Training System", Advances in Industrial Ergonomics and Safety I, June 1989, Edited by A. Mital, Taylor and Francis Ltd.
- Lee, G.H., Biegel, J.E. and Dixon, C.M., "Student Performance Evaluation for a Simulation Based Intelligent Expert Tutoring System", Proceedings, Human Factors Society 32nd Annual Meeting, Anaheim, CA, Oct. 1988
- Gonzalez, A.J. and Lee, G.H. "The Importance of Ergonomics/Human Factors in Knowledge Extraction for Expert Systems Development", Trend in Ergonomics/Human Factors V, June 1988, Edited by F. Aghazadeh, Elsevier Science Publishers
- Biegel, J.E., Interrante, L.D., Sargeant, J.M., Bagshaw, C.E., Dixon, C.M., Brooks, G.H., Sepulveda, J.A. and Lee, G.H. "Input and Instruction Paradigms for an Intelligent Simulation Training System", Proceedings of the First Florida Artificial Intelligence Research Symposium, Orlando, FL, May, 1988
- Lee, G.H. and Ramsey, J.D. "The Globe Thermometer Response under Varying Thermal Components", Proceedings, Human Factors Society 31st Annual Meeting, New York, NY, Oct. 1987
- Lee, G.H. and Ramsey, J.D. "Relationship between WBGT and WGT under Varying Thermal Components", Trends in Ergonomics/Human Factors IV, June 1987, Edited by S.S. Asfour, Elsevier Science Publishers
- Lee, G.H. and Elshennawy, A.K. "Ergonomics in Industrial Quality Inspection", Trends in Ergonomics/Human Factors IV, June 1987, Edited by S.S. Asfour, Elsevier Science Publishers
- Elshennawy, A.K. and Lee, G.H. "Human-Computer Interaction in Manufacturing", Computers and Industrial Engineering - An International Journal, Volume 13, 1987, Edited by H. Eldin, Pergamon Press
- Ramsey, J.D. and Lee, G.H. "The Impact of the Sauna Bath and Sauna Exercise Suit on Physiological Costs During Exercise", The Journal of Sport Medicine and Physical Fitness, Vol. 27, No. 1, 1987
- Lee, G.H. and Ramsey, J.D. "Should Wet-Bulb Thermometer be Shielded when Measuring Heat Stress?", Proceedings, Human Factors Society 30th Annual Meeting, Dayton, OH, Oct. 1986
- Ramsey, J.D., Burford, C.L., Duke-Dobos, F.N., Tayyari, F., Lee, G.H. and Stepp, R.G. "Thermal Environment of an Underground Mine and its Effect upon Miners", Annual American Conference for Governmental Industrial Hygiene, Vol. 14, 1986
- Lee, G.H. "Effects of Wick Contamination and Thermal Component Variation on Thermal Indices", Ph.D. dissertation, Texas Tech University, May 1986
- Hosni, Y. and Lee, G.H. " Knowledge-Based System for Task Analysis and Reliability Enhancement", Computers and Industrial Engineering - An Interantional Journal, Volume 11, 1986, Edited by H. Eldin, Pergamon Press

Burford, C.L., Ramsey, J.D., Tayyari, F., Lee, G.H. and Stepp, R.G. "A Method for Systematic Workload Estimation", Proceedings, Human Factors Society 28th Annual Meeting, San Antonio, TX, Oct. 1984

## **BOOKS**

Proceedings of the 1994 Annual International Conference on Industry, Engineering, and Management Systems, Editor

Advances in Occupational Ergonomics and Safety 3, IOS Press, Editor, 1999

## **PRESENTATIONS**

“Effects of personal protective Clothing on Functional Anthropometry”, IEA 09 Conference, August 2009, Beijing, China

“Assessment of the Biological/Chemical Isolation Suit”, ISOES’08 Annual Conference, June 2008, Chicago, IL

“Evaluating the Restricted Mobility and Reduced Dexterity of the First Responders While Wearing Personal Protective Clothing (PPC), ISOES’05 Annual Conference, June 2005, Las Vegas, NV

“Evaluating the Reduced Dexterity if the First Responders While Wearing Personal Protective Clothing and Gloves”, 8<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, November, 2003, Las Vegas, NV

“Assessment of Restricted Mobility While Wearing Encapsulating Personal Protective Clothing”, the XV<sup>th</sup> Triennial Congress of the International Ergonomics Association, August, 2003, Seoul, Korea

“Ergonomics Considerations of the Biological/Chemical Isolation Suit”, Proceedings of the XVI Annual International Occupational Ergonomics and Safety Conference, June 2005, Washington, DC

“Anthropometry of the Face Area for the Design of Facemask”, XIV Annual International Occupational Ergonomics and Safety Conference, June 1999, Orlando, FL

“Prediction of Simulator Sickness in a Fixed-Base Simulator”, XIV Annual International Occupational Ergonomics and Safety Conference, June 1999, Orlando, FL

“Effects of Aging on Pilot Performance Measured in Response Time During Emergency Situation”, XIV Annual International Occupational Ergonomics and Safety Conference, June 1999, Orlando, FL

“Relationship Between Gender, Vection, and Sickness in Virtual Environments”, Korean-Japaness Joint Human Factors Annual Meeting, October 98, Cheju, Korea “Gender Difference on the Perception of Self-motion in Virtual Environments”, XIII<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference’98, Ypsilanti, Michigan, June 1998

“Vection, Compensatory Sway, and a Simulator Sickness”, XII Annual International Occupational Ergonomics and Safety Conference’97, Washington, D.C., June 1997

"Investigation of Driving Performance, Vection, Postural Sway, and Simulator Sickness in a Fixed based Driving Simulator", 20th International Conference on Computers & Industrial Engineering, Kyung Ju, Korea, October 1996,

"Anthropometry of Specific Regions of Face Area", Annual International Industrial Ergonomics and Safety Conference, Zurich, Swiss, July, 1996,

"Computerized Modular Automobile Navigation System", The 7th Kia International Academic Seminar, Seoul, Korea, November 1994

"TravTek: System Architecture and Evaluation", The 7th Kia International Academic Seminar, Seoul, Korea, November 1994

"The Development of a Simple to Use Occupational Heat Exposure Limits", the 3rd Pan-Pacific Conference on Occupational Ergonomics, Seoul, Korea, November 1994

"Development and Evaluation of a New Computer Input Device", the 3rd Pan-Pacific Conference on Occupational Ergonomics, Seoul, Korea, November 1994

"Expert Systems for Heat Exposure Limit Determination", Annual International Industrial Ergonomics and Safety Conference, San Antonio Texas, June 1994

"Development of an Expert System for Duration Exposure Limit", IEMS'94, Cocoa Beach Florida, March 1994

"Relationships Between Natural and Psychrometric Wet Bulb Temperatures under Radiant Heat Effects", 37th Annual Meeting of Human Factors and Ergonomics Society, Seattle, WA, October 1993

"Three Dimensional Anthropometry using Moire Interferometry", 37th Annual Meeting of Human Factors and Ergonomics Society, Seattle, WA, October 1993

"IVHS: The Effect of Real-Time Traffic Updates on a Congestion Avoidance Capability and Possible Savings in Travel Time", 5th International Conference on Human-Computer Interaction, Orlando, FL, August 1993

"Ergonomic Evaluation of an In-Vehicle Navigational System (IVNS)", International Industrial Ergonomics and Safety Conference'93, Copenhagen, Denmark, June 1993

"Contribution of Controlled Experiments to the Evaluation of TravTek", IVHS America Third Annual Meeting, Washington, D.C., April 1993

"Ergonomic Issues of an In-Vehicle Navigation System", 15th Conference on Computers and Industrial Engineering, Cocoa Beach, FL, March 1993

"Innovative Ideas for Laboratory Exercise", Panel discussion, Human Factors Society 36th Annual Meeting, Atlanta, Georgia, October, 1992

"Man/Machine Interface of an In-Vehicle Navigation System", Conference on Computers and Industrial Engineering, Cocoa Beach, FL, March 1992

"Intercomparison of Thermal Indices under Varying Thermal Components", Human Factors Society 35th Annual Meeting, San Francisco, CA, September 1991

"Design and Evaluation of a Workseat for Overhead Tasks", Annual International Industrial Ergonomics and Safety Conference'91, Lake Tahoe, NV, June 1991

"Human-Computer Interfaces: Modelling and Evaluation", 13th Computers and Industrial Engineering Conference, Orlando, FL, March 1991

"Design of a Workstand for Overhead Operations: Case of the Space Shuttle Heat-Tile Replacement", Second International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automation, Honolulu, HI, August 1990

- "Human Engineering Aspects in the Automation of Industrialized Housing", Second International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automation, Honolulu, HI, August 1990
- "Detailed Design of a Simulation Based Intelligent Safety Training System (SISTS)", Annual International Industrial Ergonomics and Safety Conference '90, Montreal, Quebec, Canada, June, 1990
- "Operating Characteristics of Indices for Heat Stress and Heat Strain under Varying Thermal Components", American Industrial Hygiene Conference, Orlando, FL, May 1990
- "A Microcomputer Application to Metabolic Workload Estimation", 12th Computers and Industrial Engineering Conference, Orlando, FL, March 1990
- "Ergonomics Solutions to Cumulative Hand Trauma Disorders", Tupperware's 2nd Annual International Safety and Environmental Conference, Orlando, FL, February 1990
- "Conceptual Design of a Simulation-Based Intelligent Safety Training System", Annual International Industrial Ergonomics and Safety Conference '89, Cincinnati, OH, June 1989
- "A Microcomputer Application in Engineering Anthropometry", 11th Computers and Industrial Engineering Conference, Orlando, FL, March 1989
- "Ergonomic Issues in Quality Control", 11th Computers and Industrial Engineering Conference, Orlando, FL, March 1989
- "Student Performance Evaluation for a Simulation Based Intelligent Expert Tutoring System", Human Factors Society 32nd Annual Meeting, Anaheim, CA, Oct. 1988
- "The Importance of Ergonomics/Human Factors in Knowledge Extraction for Expert Systems Development", Annual International Industrial Ergonomics and Safety Conference '88, New Orleans, LA, June 1988
- "Development of the Predicted Duration Exposure Limit to Heat", American Industrial Hygiene Conference", San Francisco, CA, May 1988
- "Input and Instruction Paradigms for an Intelligent Simulation Training System", Florida Artificial Intelligence Research Symposium, Orlando, FL, May 1988
- "The Globe Thermometer Response under varying Thermal Component", Human Factors Society 31st Annual Meeting, New York, NY, Oct. 1987
- "Ergonomics Design Criteria in Knowledge Extraction for Expert Systems Development", The International Conference on Human Computer Interaction, Honolulu, HI, August 1987
- "Relationship Between WBGT and WGT under Varying Thermal Components", Annual International Industrial Ergonomics and Safety Conference '87, Miami, FL, June 1987
- "Ergonomics in Industrial Quality Inspection", Annual International Industrial Ergonomics and Safety Conference '87, Miami, FL, June 1987
- "Effect of Wick Contamination on the Accuracy of Wet-Bulb Thermometer Measurement", American Industrial Hygiene Conference, Quebec, Canada, June 1987
- "The Relationship Between Psychrometric and Natural Wet-Bulb Temperature Under the Effect of Radiant Heat", American Industrial Hygiene Conference, Quebec, Canada, June 1987
- "Human-Computer Interaction in Manufacturing", The 9th Annual Conference on Computers and I.E., Atlanta, GA, March 1987
- "Can We Predict the Increase in Heat Stress Due to the Use of Protective Clothing?", 2nd International Symposium on the Performance of Protective Clothing, Tampa, FL, January 1987
- "Should Wet-Bulb Thermometers be Shielded When Measuring Heat Stress?", Human Factors Society 30th Annual Meeting, Dayton, OH, Oct. 1986



"Knowledge-Based System for Task Analysis and Reliability Enhancement", 8th Annual Conference on Computers and I.E., Orlando, FL, March 1986  
"Thermal Environment of an Underground Mine and its Effect Upon Miners", International Conference on the Health of Miners, Pittsburgh, PA, June 1985  
"Physiological Response to Impermeable Clothing during Brief Bouts of Intense Physical Activity", American Industrial Hygiene Conference, Las Vegas, NV, May 1985  
"Field Validation of a Procedure for Systematic Workload Estimation", American Industrial Hygiene Conference, Las Vegas, NV, May 1985  
"A Method of Systematic Workload Estimation", Human Factors Society 28th Annual Meeting, San Antonio, TX Oct. 1984  
"Effectiveness of an Ice Cooling Garment", Brouha Work Physiology Symposium, Lubbock, TX September 1982

### **ADVISOR TO GRADUATE STUDENT**

"Human Factors Compatibility Concerns in the Selection of Display Technologies for Computer and Data Terminals", Francis Clark Westerfield, M.S., May 1987  
"A Multivariate Flow Process Charting System and Associated Applications", George Griffin, M.S., December 1987  
"Expert Systems Approach in Ergonomics", Karen Crook, M.S., July 1990  
"Design and Evaluation of an Ergonomically Correct Alphanumeric Input Device", Peter McAlindon, Ph.D., (December 1994)  
"Prediction and Quantification of Individual Differences in Susceptibility to Simulator Sickness in a Fixed-base Simulator", Young Yoo, Ph.D., (August, 1999)  
"Effects of Aging on Pilot Performance Measured in Response Time During Emergency Situation", Jae W. Lee, Ph.D., (August, 1999)  
"Comparison of Biological/Chemical Isolation Suit", J.W. Kim, MS (December 2001)  
"Training and Evaluation of the Military Tactile Device in Simulated Environments", John P. Holmquist, Ph.D., (May, 2005)  
"Effects of Flight Factors on Pilot performance, Workload, and Stress at Final Approach to Landing Phase of Flight", Kyongsun Lee, Ph.D., (December 2010)  
"A framework for Workforce Management, An Agent Based Simulation Approach", Mario Marin, Ph.D., (August 2014)  
"Model-Based Systems Engineering (MBSE) Approach to Distributed and Hybrid Simulation Systems", John Pastrana, Ph.D., (August 2014)  
"An Agile Roadmap for Live, Virtual, Constructive Integrating Training Architecture (LVC-ITA): A case Study Using a Component based Integrated Simulation Engine", Tae Woong Park, Ph.D., (May 2015)  
"Design of a Framework to measure the degree of Live, Virtual, Constructive (LVC) Simulation Interoperability", Kiyoul Kim, Ph.D., (August 2015)  
"A Study on the Analyzing Priority of Limiting factors in LVC Simulation Interoperability using AHP Method", Young Keun Yoo, MS., (August 2015)  
"A predictive Model to Identify Caregivers' Risk of Musculoskeletal Disorders", Abdulelah Ali, Ph.D., (May 2016)  
"A Hybrid Simulation Framework of Consumer-to-Consumer Ecommerce Space", Oloruntomi Joledo, Ph.D., (May 2016)

“Fire Safety and Emergency Evacuation Training for Occupants of Building Using 3D Virtual Simulation”, Sayli Bhide, Ph.D., (December 2016)  
“Design of a Framework for Sharing and generating Combat Damage Assessment (CDA) of an HLA/RTI Federation”, HongSeon Park, MS., (August 2017)  
“Dynamic Job-shop Scheduling Program (DJSP) Analysis for Military Helicopter Maintenance System (PMS)”, KyungJin Park, MS., (August 2017)  
“A Methodology on Weapon Combat Effectiveness Analytics Using the Big Data Generated by LVC Simulation”, Won Il Jung, Ph.D., (May 2018)

## **HONORS AND AWARDS**

Alpha Pi Mu

Sigma Xi

Outstanding Teacher of the Year, IEMS Department, University of Central Florida (1988)

Listed in "Who's Who in the Safety Profession"

Senior Research Award, IEMS Department, University of Central Florida (1992)

## **PROFESSIONAL ACTIVITIES**

### **MEMBERSHIPS:**

American Industrial Hygiene Association, Member

Human Factors and Ergonomics Society, Member

Institute of Industrial Engineers, Senior Member

International Society for Industrial Ergonomics and Safety, Member

Korean Scientists and Engineers in America, Member

### **ACTIVITIES:**

#### University of Central Florida:

Departmental Personnel Committee, (1985-86, 97-98)

Institutional Review Board, (1986-present)

Dean's Faculty/Staff Advisory Committee, (1987)

Transportation Systems Institute, (1986-present)

Publicity and Outreach Ad-hoc Committee, (1988-89)

Summer Employment Policies Ad-hoc Committee, (1988-89)

Faculty Advisor; Alpha Pi Mu, (1987-present)

Industrial Relations Committee, (1989-91)  
Strategic Planning Committee, (1990-91)  
Faculty Senate, (1990-92)  
Core Review Committee, (1990-91)  
Chair Review Procedures Committee, (1991-92)

Community:

Director; Asian-Pacific American Heritage Council of Central Florida, Inc., (1991-94)  
Vice-President; Asian-Pacific American Heritage Council of Central Florida, Inc., (1990-1991)

Professional Societies:

Foundation Member; International Society for Industrial Ergonomics and Safety  
Member; Ergonomics Committee, American Industrial Hygiene Association  
Editorial Board Member; American Industrial Hygiene Association Journal  
Referee; American Industrial Hygiene Association Journal  
Referee; International Journal of Industrial Ergonomics  
Referee; Computers & Industrial Engineering, An International Journal  
Session Chair; International Industrial Ergonomics and Safety Conference '87, Environmental Stresses, June 1987, Miami, FL  
Session Monitor; American Industrial Hygiene Conference, Ergonomics: Heat Stress, May 1988, San Francisco, CA  
Session Chair; International Industrial Ergonomics and Safety Conference '88, Environmental Stresses, June 1988, New Orleans, LA  
Session Chair; Second International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automation, Ergonomics in AMT Environment, August 1990, Honolulu, HI  
Scientific Advisory Board; Second International Conference on Human Aspects of Advanced Manufacturing and Hybrid Automation, August 1990  
Program Chair; Industrial Ergonomics Technical Group, Human Factors Society 35th Annual Meeting, September 1991  
Director; Local Arrangement and Strategic Planning, Human Computer Interaction International'93  
Treasurer, International Society for Occupational Ergonomics and Safety, (1993-95)  
Member; Organizing Committee, International Conference on Computers and Industrial Engineering, Japan, March 1994  
Member, Organizing Committee, The 3rd Pan-Pacific Conference on Occupational Ergonomics, November 1994  
Conference Chair, XIVth International Occupational Ergonomics and Safety Conference'99, Orlando, Florida, June 1999  
President, International Society for Occupational Ergonomics and Safety, (2000-2002)

