

Anand Subramanian, PhD, CPE, CSSBB Principal JFAssociates, Inc. (703) 395-1594 anands@jfa-inc.com

#### **Professional Profile**

Anand Subramanian is a Principal at JFAssociates, Inc. based in the Washington, DC area. Dr. Subramanian has a Doctoral and Master's Degree in Industrial Engineering from the University of Cincinnati, Ohio. He is a Certified Six-Sigma Black Belt, a Certified Professional Ergonomist, and OSHA-30 certified. Since 2003, he has been associated with JFAssociates, Inc. and his responsibilities include experimental design, data collection, video and statistical data analysis, data modeling, and reporting. His areas of specialty include ergonomics, time and motion studies, safety, process improvement, economic analyses, facilities planning, and warehouse design. He has co-authored more than 40 publications and conducted research and consulting in applied industrial engineering, time studies, occupational ergonomics, safety, and process improvement and has made presentations at a number of prestigious Industrial Engineering and Ergonomic conferences.

Dr. Subramanian is co-author of Product Development- A Structured Approach to Consumer Product Development, Design, and Manufacture - Second Edition published by Elsevier in 2014. Currently he serves as the co-editor of the Industrial and Systems Engineering Review (ISER) an open access journal (ISSN# 2329-0188) aimed at the advancement of industrial and systems engineering theory and practice as applied to any enterprise system. He also serves as the treasurer of the International Society of Occupation Ergonomics (ISOES), a member of the Human Factors and Ergonomics Society (HFES), and a reviewer for the Industrial and Systems Engineering Review (ISER). From 2007 to 2011, he served as the managing editor of the International Journal of Industrial Engineering - Theory, Applications and Practice. From 2011 to 2016, he has also served on the board of directors for the Institute of Industrial Engineers (IIE) National Capital Chapter. In 2015-2016, he was the President for the International Society for Occupational Ergonomics and Safety (ISOES).

### **Credentials and Professional Honors**

PhD, Industrial Engineering, University of Cincinnati, 2007 MS, Industrial Engineering, University of Cincinnati, 2004 BE, Production Engineering, University of Mumbai, 2001

Certified Professional Ergonomist, #1367 Certified Six-Sigma Black Belt (CSSBB) OSHA-30 Certified

### **Selected Relevant Experience**

Consulting experience includes the following industrial sectors:

- Automobile
- Call centers
- Communications
- Computer chip manufacturing
- Department stores
- Drugstores
- Electronic manufacturing
- Energy
- Financial institutions
- Food processing
- Foundry
- Healthcare and hospital
- Higher education
- Hospitality and hotel

- Landscaping
- Parcel and postal service
- Pharmaceutical
- Professional staffing services
- Plastics manufacturing
- Restaurants
- Retail stores
- Security
- Small and large assembly
- Telecommunication
- Transportation
- U.S. Government
- Warehouse

Served as an expert on ergonomics and time and motion related matters involving a variety of occupational tasks and industry settings. Designed study, visited site, collected and analyzed data, and prepared reports.

Conducted ergonomic analysis and proposed workplace solutions in a variety of industrial settings.

Served as a project lead on several time and motion projects involving a variety of occupational tasks. Designed study, visited site, collected and analyzed data, prepared reports, and provided litigation support.

Provided hands-on training on ergonomics to employees and production leads at a chip manufacturing. This was to provide ergonomics awareness and to help promote safe work practices.

Provided office ergonomic evaluations and hands-on training on ergonomics in various organizations and government agencies.

Performed proactive/ reactive workstation evaluations to identify hazards; recommend effective countermeasure to reduce or eliminate the work related musculoskeletal disorders.

Invited for a panel discussion on "Industrial Engineers and Human Factors Specialists: Challenging and Rewarding Work in Health Care" at the National Institutes of Health held in Bethesda, Maryland on October 25, 2010.

Invited to conduct a workshop on "A Holistic Approach to Process Improvement" at the 15<sup>th</sup> Annual International Conference on Industrial Engineering – Theory, Applications, and Practice held in Mexico City, Mexico from October 17 to 20, 2010.

Invited to conduct a workshop on "QUALEANERGO – Quality – Lean – Ergonomics" by the International Society of Occupational Ergonomics and Safety at their annual conference held at Dallas, Texas from June 10 through June 12 2009.

Conducted cost-benefit analysis, efficiency analysis in the meat and poultry industry to improve productivity, reduce WIP, and improved product handling.

Provided hands-on training on time and motion studies to plant managers and manufacturing engineers at an architectural aluminum manufacturing company to help them update standards in their manufacturing locations in North America.

Provided facilities layout solutions to clients in order to minimize cost, improve utilization, and productivity.

Implemented Statistical Process Control (SPC) and Measurement Systems Analysis (MSA) procedures at the transmission products manufacturing unit as part of QS-9000 auditing requirements. Conducted classroom and online training sessions for all operators at the manufacturing unit.

Assisted Undergraduate and Masters level students with Human Factors, Ergonomics, and Industrial Engineering problems. Conduct quiz, lab sessions, and evaluation and grading for undergraduate Engineering Economy and Statistics classes.

Mentored IE undergraduates on core Industrial Engineering topics in Ergonomics, Facilities Design, Engineering Economy, Quality Control, Applied Statistics, and Design for Manufacturing.

Conducted sessions and design clinics to design ergonomic workstations and demonstrate use of anthropometric equipment in design process.

### **Journal Publications**

Noriega SA, Valles-Chávez A, Sánchez J, Subramanian A, Aldape A, and Chavez EC (2010). Critical Success Factors for a Cellular Manufacturing Production. <u>International Journal of Industrial Engineering</u>, 2010, 16, pp. 399-407.

Romero R, Noriega SA, Fernandez JE, Subramanian A, Varela R, Merino AC (2010). Predictors of SMED Projects: A Case in an Industrial Sector of Juarez, Mexico. <u>International Journal of Industrial Engineering</u>, 2010, 16, pp. 493-500.

Subramanian A and Mital A (2009). Developing MTM Modifiers for Finger Disabilities. (2009). International Journal of Industrial Engineering, 2009, 16(4), pp. 331-343.

Subramanian A and Mital A (2009). Finger Disabilities and Higher Level Tasks – Developing and Validating MTM Multipliers. International Journal of Industrial Engineering, 2009, 16(4), pp. 344-352.

Subramanian A and Mital A (2009). Productivity and Disability: The Need to Modify Work Standards. <u>International Journal of Productivity and Quality Management</u>, 2009, 4(2), pp. 212-227.

Subramanian A and Mital A (2008). Time Standards and Disability: A Work Measurement Perspective. International Journal of Industrial Engineering, 2008, 15(1), pp. 113-121.

Ware BF, Kumar AR, Subramanian A, and Fernandez JE (2007) Establishing a framework for office ergonomics data management: a systems framework. <u>International Journal of Industrial Engineering</u>, 2007, 14, pp. 456-462.

Subramanian A, Desai A, Prakash L, Mital A, and Mital A (2006). Changing Trends in Injury Profiles-Revisiting Non-Fatal Occupational Injury Statistics. <u>Journal for Occupational Rehabilitation</u>, 2006, 16(1), pp. 120-152.

Mital A, Desai A, and Subramanian A (2004). Human Impediments to Technology Transfer. International Journal of Technology Transfer and Commercialization, 2004, 3(4), pp. 369-383.

Mital A, Desai A, Subramanian A, and Mital A (2004). Cost of Not Training. <u>International Journal of</u> Human Resource Development and Management, 2004, 4(3), pp. 312-322.

## **Conference Proceedings**

Subramanian A and Fernandez JE (2019). A Multi-Platform Application Based Tool to Facilitate Ergonomic Assessments and Problem Identification. Proceedings of the <u>8th Annual World Conference of the Society for Industrial and Systems Engineering</u>, Subramanian A, Fernandez JE, Santos DL, and Evangelista PF(eds.), 100, 2019.

Harrison ZJ and Subramanian A (2016). A Use of Apps to Improve Efficiency of Ergonomic Evaluations: A Case Study on Office Workstation Assessments. Proceedings of the <u>5th Annual World Conference of the Society for Industrial and Systems Engineering</u>, Subramanian A, Fernandez JE, and Santos DL, (eds.), 290-296, 2016.

Wright CD and Subramanian A (2016). Application of Holistic Process Improvement in Aerospace Industry: A Case Study. Proceedings of the <u>5th Annual World Conference of the Society for Industrial and Systems</u> Engineering, Subramanian A, Fernandez JE, and Santos DL, (eds.), 297-302, 2016.

Subramanian A., Christian M., Ware BF, and Fernandez JE (2016). Ensuring OSHA Compliance through Proactive Self-Audit. <u>Proceedings of the 28th Annual International Occupational Ergonomics and Safety</u> Conference, Subramanian A, Maikala R, and Ware BF, (eds.), 153-156, 2016.

Christian M, Fernandez JE, Subramanian A, and Ware BF (2016). The Impact of Government Health and Safety Initiatives on Healthcare and Ergonomics in the United States. <u>Contemporary Ergonomics and Human Factors 2016</u>, P. Waterson, E. Hubbard, and R. Sims (eds.), Chartered Institute of Ergonomics & Human Factors, pp. 146-152, 2016.

Christian M, Subramanian A, Ware BF, and Fernandez JE (2015). Application of Holistic Process Improvement in Healthcare: A Case Study. <u>Proceedings of the 4th Annual World Conference of the Society for Industrial and Systems Engineering</u>, Subramanian A, Fernandez JE, Ware BF and Santos DL, (eds.), 44-45, 2015.

Christian M, Subramanian A, Ware BF, and Fernandez JE (2015). The Preponderance of Workplace Injuries in Healthcare Settings and Implications of the Recently Concluded OSHA National Emphasis Program (CPL 03-00-016). Proceedings of the 4th Annual World Conference of the Society for Industrial and Systems Engineering, Subramanian A, Fernandez JE, Ware BF and Santos DL, 293-298, 2015.

Subramanian A, Ware BF, and Fernandez JE (2015). The Use of Ergonomic Principles within Lean to Improve Human Efficiency in Hospitals. <u>Proceedings of the 27th Annual International Occupational</u> Ergonomics and Safety Conference. Wyatt R, Subramanian A, and Ware BF (eds.), pp 130-134, 2015.

Ware BF, Fernandez JE, and Subramanian A (2015). The Push and Pull Forces of Carts Used by Hotel Banquets Personnel. <u>Proceedings of the 27th Annual International Occupational Ergonomics and Safety Conference.</u> Wyatt R, Subramanian A, and Ware BF (eds.), pp 135-140, 2015.

Subramanian A, Ware BF, Fernandez JE, Harrison ZJ, and Wright CD (2014). Lean Tools to Improve Staff Efficiency in the Healthcare Industry-A Case Study. <u>Proceedings of the 3<sup>rd</sup> Annual World Conference of the</u>

<u>Society for Industrial and Systems Engineering</u>. Subramanian A, Noriega-Morales SA, Fernandez JE, Ware BF and Santos DL, (eds.), pp. 485-489, 2014.

Ware BF, Fernandez JE, Subramanian A, Noriega A, and Lopez S (2014). Housekeeping Cart Push-Pull Forces: A Case Study. <u>Proceedings of the 3<sup>rd</sup> Annual World Conference of the Society for Industrial and Systems Engineering</u>. Subramanian A, Noriega-Morales SA, Fernandez JE, Ware BF and Santos DL, (eds.), pp. 490-492, 2014.

Ware BF, Subramanian A, and Goldberg EM (2014). Safety climate in the US hospitality and leisure industry. <u>Proceedings of the 26th Annual International Occupational Ergonomics and Safety Conference.</u> Subramanian A, Ware BF, Ibarra-Mejia G, Wyatt R, and Fernandez JE (eds.), pp 145, 2014.

Ware BF, Subramanian A, Harrison ZJ, and Fernandez JE (2013). Injury Trends Among Maid and Housekeeping Personnel in the Leisure and Hospitality Industry. <u>Proceedings of the 2<sup>nd</sup> Annual World Conference of the Society for Industrial and Systems Engineering</u>. Fernandez JE, Noriega-Morales SA, Subramanian A, Santos DL, and Ware BF (eds.), pp. 496-502, 2013.

Kumar AR, Subramanian A, Ware BF, and Fernandez JE (2012). Lean Tools and their Applications in an HPI Endeavor. <u>Proceedings of the 1<sup>st</sup> Annual World Conference of the Society for Industrial and Systems Engineering</u>, Fernandez JE, Santos DL, Subramanian A, Schmeidler N, Ware BF, and Kumar AR (eds.), pp. 380-385, 2012.

Kumar AR, Ware BF, Fernandez JE, Subramanian A, and Hunter M (2011). Risk Factors with Using Back Mounted Equipment in Groundskeeping Tasks: A Literature Review. <u>Proceedings of the 16<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Kempf M, Rommel S, Fernandez JE, and Subramanian A (eds.), pp. 298-304, 2011.

Ware BF, Subramanian A, Kumar AR, and Fernandez JE (2011). HPI: Holistic Approach to Process Improvement. <u>Proceedings of the 16<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Kempf M, Rommel S, Fernandez JE, and Subramanian A (eds.), pp. 606-615, 2011.

Subramanian A., Kumar AR., Ghosh S, and Bishu RR (2010). Development of a Computer Based Activity Planning Tool. <u>Proceedings of the 15<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Fernandez JE, Mital A, Guerra A, Noriega SN, Subramanian A, and Sanchez J (eds.), pp. 550-554, 2010.

Subramanian A, Kumar AR, Yang W-H, and Bishu RR (2010). Development of a Software Tool to Improve Software Quality. <u>Proceedings of the 15<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Fernandez JE, Mital A, Guerra A, Noriega SN, Subramanian A, and Sanchez J (eds.), pp. 555-561, 2010.

McLean T, Kumar AR, Subramanian A, and Bishu RR (2010). The Use of Multivariate Factor Analysis in the Development of Hand Sizes. <u>Proceedings of the XXII Annual International Occupational Ergonomics</u> and Safety Conference. Marley RJ, Kumar AR, Ware BF, and Graver P (eds.), pp. 151-155, 2010.

Subramanian A, Sairam A, and Mital A. Correction Factors for Time to Perform Computer Tasks by Individuals with Finger Disabilities. (2009). <u>Proceedings of the 14<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Subramanian A, Kumar AR, Fernandez JE, Ware BF and Kattel B (eds.), pp. 65-70, 2009.

Subramanian A, Kumar AR, and Bishu RR (2009). Use of Six Sigma Methodology To Improve Software Quality. <u>Proceedings of the 14<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Subramanian A, Kumar AR, Fernandez JE, Ware BF and Kattel B (eds.) pp. 643-649, 2009.

Subramanian A., Bishu RR, and Kumar AR (2009). Integrating Ergonomics to the Quality-Lean Approach for Improving Productivity. <u>Proceedings of the XXI Annual International Occupational Ergonomics and Safety Conference</u>. Marley RJ, Kumar AR, Ware, BF and Lockhart TE (eds.), pp. 167-172, 2009.

Kumar AR, Ware BF, Subramanian A, McClellan S, Noriega E, and Fernandez JE (2008). Applications and Ergonomic Guidelines for Dual Monitors. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory</u>, <u>Applications and Practice</u>. Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P (eds.), pp. 351-355, 2008.

Ibarra-Mejia, G, Noriega-Morales S, Ware BF, Kumar AR, Subramanian A, and Fernandez JE (2008). Ergonomics in Mexico: Standards and their Application. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P (eds.), pp. 465-468, 2008.

Fernandez JE, Halpern M, Subramanian A, Kumar, AR, and Ware BF (2008). Statistical Methods in Time Studies: Industrial Engineering and Health Care. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P (eds.), pp. 618-624, 2008.

Subramanian A and Mital A (2008). Utilizing Disability Modifiers for MTM standards to compare effectiveness of upper extremities prosthetics. <u>Proceedings of the XX Annual International Occupational</u> Ergonomics and Safety Conference. Leamon TB, Kumar AR, and Fernandez JE (eds.), pp. 257-262, 2008.

Subramanian A and Mital A (2008). Developing Modifiers for MTM-II Standards for Tasks Performed by Individuals with Disability of the Fingers. <u>Proceedings of the 2008 Industrial Engineering Research Conference.</u> J. Fowler and S. Mason (eds.), pp. 1439-1444, 2008.

Kumar AR, Subramanian A, Farris-Ware B, Alchuru S, and Fernandez JE (2007). Establishing a Framework for an Electronic Office Ergonomics Data Management System. <u>Proceedings of the 12<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Fernandez JE, Noriega SA, Mital A, Butt SE, and Fredericks TK. (eds.), pp 538-543, 2007.

Subramanian A and Mital A (2007). The Need to Develop Accurate Time Standards for Improving Economic Well Being and Productivity of Individuals with Disabilities. <u>Proceedings of the 12<sup>th</sup> Annual International Conference on Industrial Engineering - Theory, Applications and Practice.</u> Fernandez JE, Noriega SA, Mital A, Butt SE, and Fredericks TK (eds.), pp. 459-464, 2007.

Mital A, Desai A, Subramanian A, Fernandez JE (2006). Reintroducing "Engineering" In Industrial Engineering. <u>Proceedings of the 11<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice</u>. Hagiwara M, Ikeda YT, Fernandez JE, and Mital A. (eds.), pp. 459-467, 2006.

Subramanian A and Fernandez JE (2005). Elemental Analysis Techniques: A Comparative Study Proceedings of the 10<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice. Fredericks TK, Butt SE, Fernandez JE, and Mital A. (eds.), pp. 525-533, 2005.

Subramanian A, Desai A, and Mital A (2005). Need for revising the work-rest allowances for Disabled Individuals. <u>Proceedings of the 10<sup>th</sup> Annual Conference on Industrial Engineering- Theory, Applications and Practice.</u> Fredericks TK, Butt SE, Fernandez JE, and Mital A. (eds.), pp. 515-524, 2005.

Subramanian A and Mital A (2005). Injury Profiles of US Workers: Impact of Changes. <u>Proceedings of the XIX Annual International Occupational Ergonomics and Safety Conference.</u> Lockhart T, and Fernandez JE (eds.), pp. 303-307, 2005.

Mital A, Subramanian A, and Desai A (2005). The Importance of Well Structured Training Programs Across A Breadth of Occupations. <u>Proceedings of the XIX Annual International Occupational Ergonomics and Safety Conference.</u> Lockhart T, and Fernandez JE (eds.) pp. 298-302, 2005.

Mital A, Subramanian A, and Desai A (2005). The Role of Human Impediments in Achieving Successful Transfer of Technology. <u>Proceedings of the XIX-Annual International Occupational Ergonomics and Safety</u> Conference. Lockhart T, and Fernandez JE (eds.) pp. 308-314, 2005.

Subramanian A (2004). Design for Disassembly: Quantitative Analysis Software – A Consumer Product Case Study (2004), <u>Proceedings of the XVIII Annual International Occupational Ergonomics and Safety Conference</u>. Schulze L (eds.). pp 58-61, 2004.

Subramanian A, Mital A, and Desai A (2003). A Definitive Overview of the Product Life Cycle. <u>Proceedings of the 8<sup>th</sup> Annual International Conference on Industrial Engineering - Theory, Applications and Practice.</u> Fredericks TK, Butt SE, Fernandez JE, and Mital A. (eds.), pp. 858-863, 2003.

### **Published Abstracts**

Subramanian A and Kumar AR (2012). Rating Employee Performance for Non-Manufacturing Jobs Using Work Measurement Techniques. <u>The Proceedings of Capital Science 2012</u> - A Conference presented by the Washington Academy of Sciences and its Affiliated Societies March 31-April 1, 2012. Hosted by George Washington University, Marymount University and Virginia Tech.

Kumar AR and Subramanian A (2012). The Need to Integrate Human Aspect in a Process Improvement Endeavor. <u>The Proceedings of Capital Science 2012</u> - A Conference presented by the Washington Academy of Sciences and its Affiliated Societies March 31-April 1, 2012. Hosted by George Washington University, Marymount University and Virginia Tech.

Kumar AR and Subramanian A (2012). Role of Industrial Engineer in Improving Quality of Life. <u>The Proceedings of Capital Science 2012</u> - A Conference presented by the Washington Academy of Sciences and its Affiliated Societies March 31-April 1, 2012. Hosted by George Washington University, Marymount University and Virginia Tech.

Subramanian A. (2010). Lean Techniques in Healthcare Industry: A Case Study. <u>Proceedings of the 15<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice.</u> Fernandez JE, Mital A, Guerra A, Noriega SN, Subramanian A, and Sanchez J (eds.), pp. 265.

Subramanian A, Bishu RR, Fernandez JE, and Subramanian D (2010). Does Lean-Six Sigma (LSS) Effort Help Predict the Quality of the Product and Increase Profitability? A Healthcare Industry Study. <u>The Proceedings of Capital Science 2010</u>. A Conference presented by the Washington Academy of Sciences and its Affiliated Societies March 28-29, 2010. Hosted by The National Science Foundation.

Subramanian A, and Kumar AR (2008). Role of Supply Chain Metrics and Quality Control in the Supply Chain Cycle. <u>Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory.</u> <u>Applications and Practice</u>. Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P (eds.), pp. 809.

# **Books and Book Chapters**

Mital A, Desai A, Subramanian A, and Mital A (2014). Product Development - A Structured Approach to Consumer Product Development, Design, and Manufacture. *Second Edition*. Elsevier Inc., Amsterdam, Netherlands, December 2014. (ISBN: 978-0-12-799945-6)

Mital A, Desai A, Subramanian A, and Mital A (2008). Product Development - A Structured Approach to Consumer Product Development, Design, and Manufacture. *First Edition*. Elsevier Inc., Amsterdam, Netherlands, December 2008. (ISBN: 978-0-75-068309-8)

Mital A, Subramanian A, and Pennathur A (2007). Hand tools chapter in Biomechanics in Ergonomics 2007, pp. 301-345, 2<sup>nd</sup> edition, Kumar S (ed.). Taylor and Francis - CRC Press, December 2007. (ISBN: 978-0-84-937908-6)

# **CD Proceedings Edited**

Subramanian A, Fernandez JE, Santos DL, Evangelista, PF, and Kempf, M. Proceedings of the 9th Annual World Conference of the Society for Industrial and Systems Engineering, 2020.

Subramanian A, Fernandez JE, Santos DL, and Evangelista, PF. Proceedings of the 8th Annual World Conference of the Society for Industrial and Systems Engineering, 2019.

Sang SC, Borchardt J, and Subramanian A. Proceedings of the 31<sup>st</sup> Annual International Occupational Ergonomics and Safety Conference, 2019.

Córdova X, García G, Camacho, Suárez C, Sonia Avilés C, Fernandez JE, and Subramanian A. Proceedings of the 2019 International Conference on Industrial Engineering, 2019.

Subramanian A, Fernandez JE, and Santos DL. Proceedings of the 7th Annual World Conference of the Society for Industrial and Systems Engineering, 2018.

Subramanian A, Fernandez JE, and Santos DL. Proceedings of the 6th Annual World Conference of the Society for Industrial and Systems Engineering, 2017.

Subramanian A and Maikala R. Proceedings of the 29<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2017.

Subramanian A, Fernandez JE, and Santos DL. Proceedings of the 5th Annual World Conference of the Society for Industrial and Systems Engineering, 2016.

Subramanian A, Maikala R, and Ware BF. Proceedings of the 28<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2016.

Subramanian A, Fernandez JE, Santos DL, and Ware BF. Proceedings of the 4th Annual World Conference of the Society for Industrial and Systems Engineering, 2015.

Wyatt R, Subramanian A, and Ware BF. Proceedings of the 27<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2015.

Subramanian A, Noriega-Morales SA, Fernandez JE, Ware BF, and Santos DL. Proceedings of the 3rd Annual World Conference of the Society for Industrial and Systems Engineering, 2014.

Subramanian A, Ware BF, Ibarra G, Wyatt R, and Fernandez JE. Proceedings of the 26<sup>th</sup> Annual International Occupational Ergonomics and Safety Conference, 2014. Fernandez JE, Noriega-Morales SA, Subramanian A, Santos DL, and Ware BF. Proceedings of the 2<sup>nd</sup> Annual World Conference of the Society for Industrial and Systems Engineering, 2013.

Fernandez JE, Santos DL, Subramanian A, Schmeidler N, Ware BF, and Kumar AR. Proceedings of the 1<sup>st</sup> Annual World Conference of the Society for Industrial and Systems Engineering, 2012.

Kempf M, Rommel S, Fernandez JE, and Subramanian A. Proceedings of the 16<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2011.

Fernandez JE, Mital A, Guerra A, Noriega SN, Subramanian A, and Sanchez J. Proceedings of the 15<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2010.

Subramanian A, Mital A, Kumar AR, Ware BF, Lafiandra M, Kattel B, and Fernandez JE. Proceedings of the 14<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2009.

Fernandez JE, Schamburg J, Kumar AR, Subramanian A, and Evangelista P. Proceedings of the 13<sup>th</sup> Annual International Conference on Industrial Engineering Theory, Applications and Practice, 2008.

### **Presentations**

Role of Industrial Engineers in Improving Healthcare Quality and Delivery, Keynote Speech presented at the 2019 International Conference on Industrial Engineering, Quito, Ecuador, February 2019.

Occupational Ergonomics: Problem Identification and Practical Solution, Presented at the 2019 International Conference on Industrial Engineering, Quito, Ecuador, February 2019.

Work Measurement Litigation - Role of Industrial Engineers at the Institute of Industrial Engineers 2013 Best Practices In Managing Work Standards - Improving Productivity, Quality and Efficiency Standards To Grow and Profit In the New Economy, Rosemont, Illinois, USA, October 2013.

Rating Employee Performance for Non-Manufacturing Jobs Using Work Measurement Techniques at the 2012 Capital Science Conference organized by the Washington Academy of Sciences and its Affiliated Societies, Arlington, Virginia, USA, April 2012.

An Ergonomic Evaluation of Tasks at the Architect of the Capitol (AOC). Presented at Architect of the Capitol, Washington DC, August 2011.

Lean and Six Sigma Techniques to Improve Healthcare Industry. Presented at the Industrial Engineers and Human Factors Specialists: Challenging and Rewarding Work in Health Care – Panel discussion organized at the National Institutes of Health held in Bethesda, Maryland on October, 2010.

Does Lean-Six Sigma (LSS) Effort Help Predict the Quality of the Product and Increase Profitability? A Healthcare Industry Study at the 2010 Capital Science Conference organized by the Washington Academy of

Sciences and its Affiliated Societies and hosted by The National Science Foundation, Arlington, Virginia, USA, March 2010.

# Popular Media

optics.com/en/profiles/ac6fdce54d5e/editions/dc34c49270def19c0e16/pages/page/15

Subramanian A, Miller BF, and Fernandez JE, (2020). Ergonomics Recommendations for Remote Work. <u>EHS Today</u>, April 2020. <a href="https://www.ehstoday.com/health/article/21127667/ergonomics-recommendations-for-remote-work">https://www.ehstoday.com/health/article/21127667/ergonomics-recommendations-for-remote-work</a>

Subramanian A and Fernandez JE. (2019). Three Ergonomics Interventions to Prevent Hotel Housekeeping Injury. Lodging Magazine, May 2019. <a href="https://lodgingmagazine.com/three-ergonomics-interventions-to-prevent-hotel-housekeeping-injury/">https://lodgingmagazine.com/three-ergonomics-interventions-to-prevent-hotel-housekeeping-injury/</a>

Christian M, Fernandez JE, Subramanian A. (2017). Environmental Ergonomics in an Office Workplace. <u>EHS Today</u>, pp. 25-27, March 2017.

Christian M., Ware BF, Subramanian A, and Fernandez JE. (2016). Single- and Dual-Monitor Computer Setup: Ergonomic Tips. <u>EHS Today</u>. pp. 20-22, April 2016

### **Editorships**

- Co-Editor, Industrial and Systems Engineering Review (2012 Present).
- Conference Coordinator and Chair for the Annual World Conference of the Society for Industrial and Systems Engineering (2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019).
- International Journal of Industrial Engineering: Managing Editor and Reviewer (2007 2011).
- Annual International Conference on Industrial Engineering Theory, Applications and Practice: Arrangement Co-Chair (2008, 2009, 2010, 2011).
- Registrations coordinator and Organizing committee of the International Conference on Enhancing Resources and Effectiveness at Workplace to be held in Kathmandu, Nepal August 3-5, 2009.

#### Peer-Reviewer

- Industrial and Systems Engineering Review
- International Journal of Industrial Ergonomics

## **Professional Affiliations**

- Assistant Vice President for Communication and Web Development, Mid-Atlantic Region, Institute of Industrial Engineers (2011 2013).
- Board of Directors Marketing and Public Relations, IIE National Capital Chapter, Institute of Industrial Engineers (2011 2016).
- 2015-2016 President for the International Society of Occupational Ergonomics and Safety (ISOES).; 2017- Present Treasurer for the International Society of Occupational Ergonomics and Safety (ISOES) (Member since 2007)