

YUEQING LI

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Director of Human-Computer Interaction Lab
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Research Interests

Human Factors & Ergonomics

- Human factors & ergonomics
- Occupational safety
- Driving safety
- Safety engineering
- Physiological ergonomics
- EMG-based robotics

Date Analytics

- Statistics
- Machine learning & algorithm design
- Data mining
- Neural signal classification

Neuroergonomics

- Brain-computer interface (BCI)
- Neurocognitive processing
- BCI-based rehabilitation
- BCI-based robotics
- Neural signal-based UAV
- Neuroergonomics

Human-computer interaction (HCI)

- Usability analysis
- Haptic-user interface
- Vibrotactile-user interface
- Intelligent user interface
- User behavior modeling
- Cognitive engineering
- Wearable equipment
- Augmented Reality (AR)-based HCI
- Game-based study design
- Face recognition

Honors

Engineering Faculty Fellow, *College of Engineering, Lamar University (2017-2020)*

Eric Malstrom Endowed Memorial Scholarship, *Department of Industrial Engineering, University of Arkansas (2009-2010)*. This scholarship is awarded to the outstanding graduate students with exceptional academic promise in the Department of IE, University of Arkansas.

Outstanding Graduate Award, *Nanjing University of Aeronautics and Astronautics (2004-2005)*

Outstanding Teacher Award, *Henan Polytechnic University (2002-2003)*. This award is given to the most excellent teacher with exceptional teaching and is the highest level award in Henan Polytechnic University.

Renmin Scholarship, *Zhengzhou University (1996-2000)*

Excellent Student Award, *Zhengzhou University (1996-1998)*

Education

North Carolina State University, Department of Industrial and Systems Engineering **Raleigh, NC**

Ph. D. in Industrial Engineering/minor in Statistics (GPA: 3.83/4.0) *Aug 2014*

Dissertation: Evaluation of collaborative brain-computer interface (BCI) for people with severe motor disabilities

Advisor: Prof. Chang S. Nam

University of Arkansas, Department of Industrial Engineering **Fayetteville, AR**

M. S. in Industrial Engineering (GPA: 3.83/4.0) *Aug 2009*

Dissertation: A P300-based brain-computer interface (BCI): effects of luminosity contrast, stimulus duration, interface type & screen size

Advisor: Prof. Chang S. Nam

Nanjing University of Aeronautics and Astronautics,

School of Economics and Management

Nanjing, China

M. S. in Economics

Mar 2006

Thesis: Research on the strategy of Jiaozuo's industry structure adjustment

Advisor: Prof. Ruilan Wang

Zhengzhou University, School of Physics Engineering

Zhengzhou, China

B. S. in Electronics Engineering

Jul 2000

Thesis: Research on carbon dioxide-based laser medical instrument

Advisor: Prof. Dadi Jin

Peer-Reviewed Journal Publications

In Press

1. Wang, Y., Qian, C., & **Li, Y.** (2019). Evaluation of the Regional Green Innovation Performance in China Based on a Three-Stage Associated DEA Model. *Expert Systems with Applications* (under review).
2. Wu, Y., Zhang., X., & **Li, Y.** (2019). How to Improve Perceived eWOM Message Credibility: The Mediation Role of Communication Context. *Information & Management* (under review).
3. Kshirsagar, P., Tcheslavski, G., & **Li, Y.** (2019). On the EEG-based autism diagnostics while using Discrete Wavelet Transform. *Research in Autism Spectrum Disorders* (under review).
4. Ni, J., Bellon-Harn, M., Zhang, J., **Li, Y.**, & Manchaiah, V. (2019). Twitter usage using common reference to tinnitus. *American Journal of Audiology* (under review).
5. Ni, J., Gao, F., Tokgoz, B., & **Li, Y.** (2019). Practical risk assessment tool for chemicals at the Gulf of Mexico ports. *International Journal of Critical Infrastructures* (accepted).
6. Zuo, W., **Li, Y.**, & Wang, Y. (2018). Research on the optimization of new energy vehicle industry research and development subsidy about generic technology based on the three-way decisions. *Journal of Cleaner Production*, 212, 46-55.
7. Tian, Y., Deng Z., Luo, J., & **Li, Y.** (2017). An Intuitionistic Fuzzy Set Based S³VM Model for Binary Classification with Mislabeled Information. *Fuzzy Optimization and Decision Making*, DOI 10.1007/s10700-017-9282-z.
8. Tian, Y., Sun, M., Deng Z., Luo, J., & **Li, Y.** (2017). A new fuzzy set and nonkernel SVM approach for mislabeled binary classification with applications. *IEEE Transactions on Fuzzy Systems*, 1536-1545.
9. Shi, Y., Xiang, Y., Jin, T., & **Li, Y.** (2016). Joint Planning for Spare Parts Inventory and Preventive Maintenance in a Multi-Echelon Network. *International Journal of Inventory Research*, 3, 263-281.
10. **Li, Y.**, & Nam, C.S. (2016) Evaluation of collaborative brain-computer interface for people with motor disabilities. *IEEE Computational Intelligence Magazine*, 11, 56-66.
11. Nam, C.S., Moore, M., Choi, I., & **Li, Y.** (2015). Designing Better, Cost-Effective Brain-Computer Interfaces. *Ergonomics in Design: The Quarterly of Human Factors Applications*, October, 13-19.
12. **Li, Y.**, Jeon, W., & Nam, C.S. (2015). Navigation by vibration: effects of vibrotactile feedback on a navigation task. *International Journal of Industrial Ergonomics*, 46, 76-84.
13. **Li, Y.**, Bahn, S., Nam, C.S., & Lee, J. (2014). Effects of luminosity contrast and stimulus duration on user performance and preference in a P300-based brain-computer interface (BCI). *International Journal of Human-Computer Interaction*, 30, 151-163.
14. Nam, C.S., **Li, Y.**, Yamaguchi, T., & Smith-Jackson, T.L. (2012). Haptic user interface for the visually impaired: implications for haptically enhanced science learning systems. *International Journal of Human-Computer Interaction*, 28, 784-798.
15. **Li, Y.**, Nam, C. S., Shadden, B. B., & Johnson, S. L. (2010). A P300-Based Brain-Computer Interface (BCI): Effects of Interface Type and Screen Size. *International Journal of Human-Computer Interaction*, 27, 52-68.
16. Nam, C. S., **Li, Y.**, & Johnson, S. (2010). Evaluation of P300-Based Brain-Computer Interface (BCI) in Real-World Contexts. *International Journal of Human-Computer Interaction*, 26, 621-637.

17. Wang, Y., Dang, Y., **Li, Y.**, & Liu, S. (2010). An approach to increase prediction precision of GM(1,1) model based on optimization of the initial condition. *Expert Systems with Applications*, 37, 5640-5644.
18. Nam, C. S., Jeon, Y., **Li, Y.**, Kim, Y-J., & Yoon, H. (2009). Usability of the P300 Speller: Towards a More Sustainable Brain-Computer Interface. *eMinds: International Journal on Human-Computer Interaction*, 1, 111-125.
19. Nam, C. S., Johnson, S., **Li, Y.**, & Seong, Y. (2009). Evaluation of Human-Agent User Interfaces in Multi-Agent Systems. *International Journal of Industrial Ergonomics*, 39, 192-201.
20. Wang, Y., Dang, Y., **Li, Y.**, & Liu, S. (2009). A new method to improve prediction precision of GM (1, 1) model. *The Journal of Grey System*, 21, 301-308.
21. **Li, Y.**, Wang, R., Cui, X., & Gu, J. (2005). Contributions of NPO to America Employment and Inspiration to China. *Reform of economic system*, 3, 136-139. ISSN 1006-012X (in Chinese)
22. **Li, Y.**, & Zhang, J. (2005). The Sustainable Development of Chinese Economy: Problems and Solutions. *Market Weekly*, 1, 106-108. ISSN 1008-4428 (in Chinese)
23. Gu, J., Wang, R., Cui, X., & **Li, Y.** (2005). Game theory-based analysis of compensation combination of long & short term and handlers' attitude to risk. *Commercial Research*, 22, 164-165. ISSN 1001-148X (in Chinese)
24. Li, D., Zhang, J., **Li, Y.**, Bu, X., & Wang, Ch. (2005). VHDL and the Design of Digital Circuit. *Electric Switchgear*, 2, 6-8. ISSN 1004-289X (in Chinese)
25. Zhang, J., **Li, Y.**, & Wang, F. (2005). How to connect the research to teaching and strengthen the teaching effect in the course of single-chip microcomputer? *Vocational Education Research*, 7, 115-115, ISSN 1672-5727 (in Chinese)
26. Li, Y., Wang, R., & Cui, X. (2004). Discussion of the Urbanization. *Market Weekly*, 11, 55-57. ISSN 1008-4428 (in Chinese)
27. Cui, X., **Li, Y.**, & Wang, R. (2004). Industrial Cluster and Economic Development of the Middle and West China. *Market Weekly*, 12, 18-20. ISSN 1008-4428 (in Chinese)

Journal (to be submitted)

1. Mahesh, V., **Li, Y.**, Craig, B. (2019). EMG Analysis of Muscle Pump and Associated Lower Extremity Volume Change in Humans for Various Activities. *Applied Ergonomics*.
2. Dabiran, Y., & **Li, Y.** (2019). The Effect of Background Music on Task Performance. *Psychology of Music*.
3. Dabiran, Y., & **Li, Y.** (2019). The Effect of Music Genre and Tempo on Task Performance. *Work*.
4. **Li, Y.**, & Li, G., Craig, B. (2019). A Review of Port-Related Musculoskeletal Disorders (MSDs). *Ergonomics*.
5. **Li, Y.**, & Li, G. (2019). An evaluation of web maps based on design features cross-culture effect. *International Journal of Human-Computer Interactions*.
6. **Li, Y.**, Mahesh, V., Craig, B. (2019) Evaluation of the flooring effect on lower extremity discomfort during food service tray-line jobs. *Ergonomics*.

In Preparation

1. **Li, Y.**, Nam, C.S., & Johnson, S. Markov Chain based haptic user behavior analysis: implications for haptically enhanced science learning systems.
2. **Li, Y.**, & Nam, C.S. Boosting support vector machine (BSVM): a new algorithm to improve EEG classification.
3. **Li, Y.**, & Nam, C.S. Effect of LED frequency and color: towards a user-specific SSVEP-based brain-computer interface (BCI).
4. **Li, Y.**, & Jian Luo. A new SVM algorithm for EEG classification.
5. Akurke, S., & **Li, Y.** The effect of screen size of smart mobile phone on users' discomfort and the usability.

Book Chapters

1. **Li Y.**, Kaneria A., Zhao X., Manchaiah V. (2020). Learning Drivers' Behavior Using Social Networking Service. In: Stanton N. (eds): *Advances in Human Factors of Transportation*, 341-350, Springer, Cham.
2. Qian C., **Li Y.**, Zuo W., Wang Y. (2020). Analysis of Driving Safety and Cellphone Use Based on Social Media. In: Stanton N. (eds): *Advances in Human Factors of Transportation*, 521-530, Springer, Cham.
3. Mhamunkar, M., Bagane, S., Kolhe, L., Stingham, V., Ahuja, M., & **Li, Y.** (2020). Handheld grass cutter machine with supporting wheel. In: Goossens R., Murata A. (eds): *Advances in Social and Occupational Ergonomics*, 228-235, Springer, Cham.
4. Patel, J., Madkour, N., Jani, J., Rao, G., Sharma, P., & **Li, Y.** (2020). Ergonomic improvements in heavy-duty four-wheel cart with pelvis support. In: Goonetilleke R., Karwowski W. (eds): *Advances in Physical Ergonomics and Human Factors*, 213-221, Springer, Cham.
5. Li, G., & **Li, Y.** (2019). Chinese Pinyin Input Method in Smartphone Era: A Literature Review Study. In: Yamamoto S., Mori H. (eds): *Human Interface and the Management of Information*, 33-43, Springer, Cham.
6. Johnson, S., Yamaguchi, T., **Li, Y.**, Kim, H.N., & Nam, C.S. (2010). Analyzing the behavior of users with visual impairments in a haptic learning application. In V. Rice (Eds): *Advances in understanding human performance*, 675-683.

Peer Reviewed Conference Proceedings

1. **Li, Y.**, Kaneria, A., Qian, C., & Craig, B. (2019). Learning drivers' behavior from social networking. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 1792-1796.
2. Qian, C., **Li, Y.**, & Wang, Y. (2019). Text mining tweets on driving safety and cellphone use. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 1537-1540.
3. Li, G., **Li, Y.**, & Craig, B. (2018). A systematic review of musculoskeletal disorders (MSDs) among port workers. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 201-211.

4. Zuo, W., Wang, Y., & **Li, Y.** (2018). How to Get to Know Your Customers Better? A Case Analysis of Smartphone Users with Chinese Input Method Based on Baidu Index. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 131-138.
5. Paul, N., Fnu, M., Julapally, S., **Li, Y.**, & Craig, B. (2018). Analysis of Muscular Fatigue and Foot Discomfort While Wearing Different Types of Men's Formal Shoes. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 411-419.
6. Akurke, S., & **Li, Y.** (2018). Neck Flexion Angle and User Experience Compared on iPhone X and Samsung S8+. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 244-250.
7. Mahesh, V., **Li, Y.**, & Craig, B. (2017). Effect of flooring on lower extremity discomfort during food service tray-line jobs. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 950-954.
8. Li, G., **Li, Y.**, Zhang, J., & Zhang, X. (2017). Design feature and cross-culture based comparative evaluation of web maps. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 818-822.
9. Mahesh, V., **Li, Y.**, & Craig, B. (2017). Effect of walking, running and gradients on muscle pump and edema. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 335-342.
10. Akurke, S., **Li, Y.**, & Craig, B. (2017). Effect of smart phone use on upper extremity and neck. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 241-249.
11. Juloori, A., **Li, Y.**, & Zhu, W. (2017). Development of a Game-Based and Haptically Enhanced Application for People with Visual Impairment. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 186-192.
12. Syed, U., Patil, M., **Li, Y.**, & Craig, B. (2017). Ergonomics Evaluation of a Manual Braking System for Skateboards. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 157-164.
13. Yesodha, K., Narasimhan, V., **Li, Y.**, & Criag, B. (2017). Ergonomic Evaluation of Videogame Controllers. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 384-391.
14. Ilori, A., **Li, Y.**, Mahesh, V., & Craig, B. (2016). Effect of position: An ergonomics evaluation of police wearable equipment. In *Proceedings of 7th International Conference on Applied Human Factors and Ergonomics*, 199-207.
15. **Li, Y.**, & Nam, C.S. (2015). A collaborative brain-computer interface (BCI) for ALS patients. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
16. Jeon, W., **Li, Y.**, Bahn, S., & Nam, C.S. (2013). Assessing the effectiveness of vibrotactile feedback on a 2D navigation task. In M. Kurosu (Ed.): *Human-Computer Interaction*, Part IV, HCII 2013, LNCS 8007, 594-600.
17. **Li, Y.**, Woo, J., & Nam, C.S. (2012). A preliminary research on P300-based BCI application for people with motor disabilities. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 56, 1049-1053.
18. Johnson, S., **Li, Y.**, Nam, C.S. & Yamaguchi, T. (2011). Analyzing user behavior within a haptic system. In J.A. Jacko (Ed.): *Human-Computer Interaction*, Part II, HCII 2011, LNCS 6762, 62-70.

19. **Li, Y.**, Johnson, S., & Nam, C.S. (2011). Haptically enhanced user interface to support science learning of visually impaired. In J.A. Jacko (Ed.): *Human-Computer Interaction*, Part IV, HCII 2011, LNCS 6764, 68-76.
20. Yamaguchi, T., Johnson, S., Kim, H.N., **Li, Y.**, Nam, C.S., & Smith-Jackson, T. L. (2009). Haptic Science Learning System for Students with Visual Impairments: A Preliminary Study. In C. Stephanidis (Ed.): *Universal Access in HCI*, HCII 2009, LNCS 5616, 157-166.
21. **Li, Y.**, Nam, C.S., & Choo, Y-G. (2009). Towards optimizing P300 Speller matrix design while decreasing human error. In *Proceedings of 17th World Congress on Ergonomics*, Beijing, China.
22. Nam, C.S., Johnson, S., & **Li, Y.** (2008). Environmental Noise and P300-Based Brain-Computer Interface (BCI). In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 52, 803-807.

Technical Reports

1. Nam, C.S., **Li, Y.**, & Kim, Y-J. (2007). Experimental evidence on team coordination and collaboration within a distributed logistics network. In *A human-centered approach to sense and respond logistics*, 23-44.

Presentations

1. **Li, Y.**, Kaneria, A., Zhao, X., Manchaiah, V. (2019). Learning Drivers' Behavior Using Social Networking Service. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 341-350.
2. Qian, C., **Li, Y.**, Zuo, W., Wang, Y. (2019). Analysis of Driving Safety and Cellphone Use Based on Social Media. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 521-530.
3. Abbasi, E., & **Li, Y.** (2019). An investigation in Beaumont crashes using Classification and Regression Trees Method. In *Houston HFES Symposium*, Houston, TX.
4. Paul, N., **Li, Y.**, & Craig, B. (2019). The Effect of Smartphone Using Postures and Tasks on Neck Flexion, Upper Extremity Muscular Fatigue and Users Discomfort. In *Houston HFES Symposium*, Houston, TX.
5. Patel, S., & **Li, Y.** (2019). Art of collecting data using feedback system in Hospitality Industry. In *1st Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.
6. Rao, G., Patel, J., Jani, J., Madkour, N., Sharma, P., **Li, Y.**, & Craig, B. (2019). Ergonomic Improvements in Heavy-Duty Four-Wheel Cart with Pelvis Support. In *1st Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.
7. Modi, K., & **Li, Y.** (2018). Evaluation of holographic head-up display to enhance driving safety. In *Houston HFES Symposium*, Houston, TX.
8. Paul, N., **Li, Y.**, & Craig, B. (2018). Analysis of Muscular Fatigue & Foot Discomfort While Wearing Different Types of Men's Formal Shoes. In *Houston HFES Symposium*, Houston, TX.
9. Ashan, M., **Li, Y.**, & Gupta, K. (2018). Real Time Face Recognition Under Various Unconstrained Situations. In *Houston HFES Symposium*, Houston, TX.

10. Manchaiah, V., Bellon-Harn, M., Azios, M., **Li, Y.**, Zhang, J., Irani, F., & Ratinaud, P. (2018). Text Pattern Analysis of Secondary Data from Media in Speech and Hearing Sciences. American Speech-Language and Hearing Association (ASHA) Annual Convention, Boston.
11. Li, G., **Li, Y.**, & Craig, B. (2018). A systematic review of musculoskeletal disorders (MSDs) among port workers. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 201-211.
12. Zuo, W., Wang, Y., & **Li, Y.** (2018). How to Get to Know Your Customers Better? A Case Analysis of Smartphone Users with Chinese Input Method Based on Baidu Index. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 131-138.
13. Paul, N., Fnu, M., Julapally, S., **Li, Y.**, & Craig, B. (2018). Analysis of Muscular Fatigue and Foot Discomfort While Wearing Different Types of Men's Formal Shoes. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 411-419.
14. Akurke, S., & **Li, Y.** (2018). Neck Flexion Angle and User Experience Compared on iPhone X and Samsung S8+. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 244-250.
15. Paul, N.P., Syed, U. S., Subbarao, K. S., & **Li, Y.** (2017). Manual Breaking System for Skateboards. In *Fifth Annual Texas STEM Conference*, Beaumont, TX.
16. Li, G. & **Li, Y.** (2017). A design feature based comparative evaluation of web maps. In *Fifth Annual Texas STEM Conference*, Beaumont, TX.
17. Zuo, W., Wang, Y., & **Li, Y.** (2017). An improved grey decision-making model and its application. In *Fifth Annual Texas STEM Conference*, Beaumont, TX.
18. Mahesh, V., **Li, Y.**, & Craig, B. (2017). Effect of flooring on lower extremity discomfort during food service tray-line jobs. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 950-954.
19. Li, G., **Li, Y.**, Zhang, J., & Zhang, X. (2017). Design feature and cross-culture based comparative evaluation of web maps. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 818-822.
20. Mahesh, V., **Li, Y.**, & Craig, B. (2017). Effect of walking, running and gradients on muscle pump and edema. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 335-342.
21. Akurke, S., **Li, Y.**, & Craig, B. (2017). Effect of smart phone use on upper extremity and neck. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 241-249.
22. Juloori, A., **Li, Y.**, & Zhu, W. (2017). Development of a Game-Based and Haptically Enhanced Application for People with Visual Impairment. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 186-192.
23. Syed, U., Patil, M., **Li, Y.**, & Craig, B. (2017). Ergonomics Evaluation of a Manual Braking System for Skateboards. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 157-164.
24. Yesodha, K., Narasimhan, V., **Li, Y.**, & Criag, B. (2017). Ergonomic Evaluation of Videogame Controllers. In *Proceedings of International Conference on Applied Human Factors and Ergonomics*, 384-391.
25. Li, G., Li, Y., Zhang, J., Zhang, X. (2017). A Design Feature and Cross-Culture Based Comparative Evaluation of Web Maps. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.

26. Makarla, J., Kukadia, A., Abraham, A., Asnani, S., Nittala, L., Li, Y. (2017). Evaluation of Manual Typing and Speech Recognition-Based Typing in Microsoft Word for People with Visual and/or Motor Disabilities. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.
27. Modi, K., Dave, P., Rana, D., Raval, D., Vaishnav, C., Li, Y. (2017). Evaluation of a Holographic Head-Up Display to Enhance Driving Safety. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.
28. Mahesh, V., Li, Y., Craig, B. (2017). Effect of Motion Type and Inclination on Muscle Activity and Edema. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.
29. Akurke, S., Li, Y., Craig, B. (2017). Effect of screen size of Smartphone on neck and arms. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.
30. Dabiran, Y., Li, Y., Craig, B. (2017). Evaluating the effect of music on cognitive task performance. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.
31. Juloori, A., Li, Y., Zhu, W. (2017). Development of a Serious Game for the Visually Impaired. In *Southwest HFES Symposium*, June 9, 2017, San Antonio, TX.
32. Illori, A., **Li, Y.**, Mahesh, V., and Craig, B. (2016). Effect of position: An ergonomics evaluation of police wearable equipment. In *Proceedings of 7th International Conference on Applied Human Factors and Ergonomics*, Orlando, Florida, July 2016.
33. Chodapaneedi, T., Illori, A., Sibbadi, B., Allam, V., Gandi, R., **Li, Y.**, Craig, B. (2016). Order Input Interface for People with Speech and Hearing Impairment at a Drive-Thru. In *Houston Human Factor and Ergonomics Society 2016 Symposium*, Houston, Texas, June 2016.
34. Mahesh, V., **Li, Y.**, & Craig, B. (2016). Evaluation of flooring on comfort and fatigue in trayline duties. IIE Annual Conference, Anaheim, California, May 2016.
35. **Li, Y.**, & Nam, C.S. (2015). A collaborative brain-computer interface (BCI) for ALS patients. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
36. **Li, Y.** (2015). A collaborative brain-computer interface (BCI). *Houston Human Factor and Ergonomics Society 2015 Symposium*, Houston, Texas, June 2015.
37. Jeon, W., **Li, Y.**, Bahn, S., & Nam, C.S. (2013). Assessing the effectiveness of vibrotactile feedback on a 2D navigation task. In M. Kurosu (Ed.): *Human-Computer Interaction*, Part IV, HCII 2013, LNCS 8007, 594-600.
38. **Li, Y.**, Woo, J., & Nam, C.S. (2012). A preliminary research on P300-based BCI application for people with motor disabilities. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 56, 1049-1053.
39. Johnson, S., **Li, Y.**, Nam, C.S. & Yamaguchi, T. (2011). Analyzing user behavior within a haptic system. In J.A. Jacko (Ed.): *Human-Computer Interaction*, Part II, HCII 2011, LNCS 6762, 62-70.
40. **Li, Y.**, Johnson, S., & Nam, C.S. (2011). Haptically enhanced user interface to support science learning of visually impaired. In J.A. Jacko (Ed.): *Human-Computer Interaction*, Part IV, HCII 2011, LNCS 6764, 68-76.
41. Yamaguchi, T., Johnson, S., Kim, H.N., **Li, Y.**, Nam, C.S., & Smith-Jackson, T. L. (2009). Haptic Science Learning System for Students with Visual Impairments: A Preliminary Study. In C. Stephanidis (Ed.): *Universal Access in HCI*, HCII 2009, LNCS 5616, 157-166.
42. **Li, Y.**, Nam, C.S., & Choo, Y-G. (2009). Towards optimizing P300 Speller matrix design while decreasing human error. In *Proceedings of 17th World Congress on Ergonomics*, Beijing, China.

43. Nam, C.S., Johnson, S., & **Li, Y.** (2008). Environmental Noise and P300-Based Brain-Computer Interface (BCI). In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 52, 803-807.
44. Nam, C.S., Lyons, J., & **Li, Y.** (2007). Team Coordination and Collaboration within a Distributed Logistics Network. *Annual Symposium on Applied Experimental Research*. Fairfax, VA.

Posters

1. Mhamunkar, M., Bagane, S., Kolhe, L., Singh, V., **Li, Y.**, & Craig, B. (2019). Handheld Grass Cutter Machine with Supporting Wheels. In *Houston HFES Symposium*, Houston, TX.
2. Patel, J., Rao, G., Jani, J., Madkour, N., Sharma, P., **Li, Y.**, & Craig, B. (2019). Ergonomic Improvements in Heavy-Duty Four-Wheel Cart with Pelvis Support. In *Houston HFES Symposium*, Houston, TX.
3. Patel, S., **Li, Y.**, & Craig, B. (2019). Ergonomics evaluation of material handling task using a tilt table cart. In *Houston HFES Symposium*, Houston, TX.
4. Li, G., **Li, Y.**, & Craig, B. (2019). Exploring the effects of weather, lighting condition and traffic volume on driver behavior: A simulator-based study. In *Houston HFES Symposium*, Houston, TX.
5. Qian, C., **Li, Y.**, & Wang, Y. (2019). Text Mining Tweets on Driving Safety and Cellphone Use. In *Houston HFES Symposium*, Houston, TX.
6. Kaneria, A., **Li, Y.**, & Craig, B. (2019). Learning Drivers' Behavior Using Social Networking Service. In *Houston HFES Symposium*, Houston, TX.
7. Paul, N., **Li, Y.**, & Craig, B. (2019). The Effect of Different Smartphone-Use Postures on Neck Flexion. In *1st Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.
8. Qian, C., Wang, Y. & **Li, Y.** (2019). Evaluation of the Regional Green Innovation Performance in China Based on a Three-Stage Associated DEA Model. In *1st Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.
9. Li, G., **Li, Y.**, & Craig, B. (2019). Exploring the effects of weather, lighting condition and traffic volume on driver behavior: A simulator-based study. In *1st Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.
10. Zuo, W., Wang, Y., **Li, Y.**, & Li, G. (2018). Research on the Smartphone Users with Chinese Input Method Based on Big data. In *Houston HFES Symposium*, Houston, TX.
11. Li, G., **Li, Y.**, & Zuo, W. (2018). Exploring the Easiest Way to Edit A Chinese Message: A User Experience Study. In *Houston HFES Symposium*, Houston, TX.
12. Juloori, A., & **Li, Y.** (2018). Study With Fun: A Game-Based & Haptically Enhanced Application For The Visually Impaired To Learn Astronomy. In *Houston HFES Symposium*, Houston, TX.
13. Akurke, J., & **Li, Y.** (2018). Neck flexion angle while utilizing iPhone X and Samsung S8+. In *Houston HFES Symposium*, Houston, TX.
14. Ashan, M., & **Li, Y.** (2017). Real Time Facial Recognition in Unconstrained Environment. In *Fifth Annual Texas STEM Conference*, Beaumont, TX.
15. Syed, U., Kanaparthi, S., Paul, N., Treasha, M., **Li, Y.**, Craig, B. (2017). Evaluation of a skateboard manual breaking system. In Southwest HFES Symposium, June 9, 2017, San Antonio, TX.

16. Kallu, C., Dokka, S., Gangadhar, S., Gundabathula, P., Patel, N., **Li, Y.** (2017). Evaluation of reading media. In Southwest HFES Symposium, June 9, 2017, San Antonio, TX.
17. Oggu, V., Kancherla, S., Namala, B., Saragadam, S., **Li, Y.** (2017). Comparision of three word processors. In Southwest HFES Symposium, June 9, 2017, San Antonio, TX.
18. Gudapati, J., Jagadeesan, A., Yesodha, K., **Li, Y.** (2017). Evaluation of MOBAs New Player Training Tutorials. In Southwest HFES Symposium, June 9, 2017, San Antonio, TX.
19. Vanukura, R., Kandakatla, J., Konidhina, M., Satti, S., Penumatsa, S., **Li, Y.**, Craig, B. (2016). Resume Search with Multiple Key-Words of Job Requirement. *Houston Human Factor and Ergonomics Society 2016 Symposium*, Houston, Texas.
20. Illori, A., Li, G., **Li, Y.**, Zhang, J., Craig, B. (2016). Effects of Category Wording and Color Contrasts on the Usability of a Library Website in a Language-Diverse Institution. *Houston Human Factor and Ergonomics Society 2016 Symposium*, Houston, Texas.
21. Patil, N., Kethineedi, S., Dabiran, Y., Saiprem, P., Li, G., **Li, Y.**, Craig, B. (2016). Evaluation of User Experience in Different Instant Messaging. *Houston Human Factor and Ergonomics Society 2016 Symposium*, Houston, Texas.
22. Dabiran, Y., Navuluri, S., Piya, S., **Li, Y.**, Craig, B. (2016). Music Ergonomics: A Study on Violin/Viola Shoulder Rest. *Houston Human Factor and Ergonomics Society 2016 Symposium*, Houston, Texas.
23. Johnson, S., **Li, Y.**, Jeon, Y., Kim, Y-J., & Nam, C.S. (2008). A P300-Based Brain-Computer Interface (BCI): Towards a Non-muscular Communication System for People with Neuromuscular Impairments. *Arkansas Chapter of the Society for Neuroscience Annual Meeting*, Little Rock, AR.

Teaching Experience

Lamar University

Beaumont, TX

Assistant Professor

Undergraduate

INEN 2373 Engineering Economics (*Fall 2015, Spring 2015, Fall 2016, Fall 2017, Summer 2017, Summer 2018, Fall 2018, Spring 2019, Summer 2019*)

INEN 3320 Introduction to Probability and Statistics (*Fall 2019*)

INEN 4320 Statistical Decision Making (*Spring 2015, Spring 2016, Spring 2017, Spring 2018*)

INEN 4376 Occupational Ergonomics (*Fall 2014, Fall 2015, Fall 2016*)

ENGR 4301 Work Design (*Fall 2014*)

ENGR 4301 Data Mining (*Spring 2019*)

Graduate

INEN 5382 Enterprise Business Intelligence – Data Mining (*Spring 2018, Spring 2019*)

INEN 5376 Occupational Ergonomics (*Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018, Fall 2019*)

INEN 5301 Human-Computer Interaction (*Spring 2015, Spring 2016, Spring 2017*)

INEN 5320 Statistical Decision Making (*Spring 2015, Summer 2015, Spring 2016, Summer 2016, Spring 2017*)

INEN 5374 Human Factors Engineering (*Summer 2015, Summer 2016*)

North Carolina State University

Raleigh, NC

Teaching Assistant

ISE 352 Work analysis and design (undergraduate) (*Fall 2013, Spring 2014*)

ISE 540 Human factors in systems design (graduate), *Spring 2013*

Henan Polytechnic University

Jiaozuo, China

Faculty (Lecturer)

Theory of Circuit (*Spring 2002*)

C programming (*Spring 2002, Spring 2003*)

Theory of Robotics (*Fall 2002*)

Theory of Control (*Fall 2001*)

Theory of transducer (*Fall 2001, Fall 2002*)

Theory of Electronic Technology (*Spring 2001*)

Design of Experiment (*Spring 2001*)

Special English for Electronics (*Fall 2000*)

Introduction to Computers (*Fall 2000*)

Professional Experience

Lamar University

Beaumont, TX

Assistant Professor of Industrial Engineering (Aug 2014-present)

- Found Human-Computer Interaction (BCI) Lab
- Found Neuroergonomics Lab
- Found Driving Simulations Lab
- Co-Direct Human Factor & Ergonomics Lab

North Carolina State University

Raleigh, NC

Research Assistant, Teaching Assistant (Aug 2011-Aug 2014)

- Develop vibrotactile-user interface
- Develop SSVEP-based brain-computer interface (BCI)
- Develop collaborative SSVEP-based BCI
- Develop adaptive SVM algorithm for online BCI

University of Arkansas

Fayetteville, AR

Research Assistant (Aug 2006-Aug 2011)

- Develop haptic-user interface for people with visual impairment (National Science Foundation funded research)
- Develop P300-based brain-computer interface (BCI)
- Develop intelligent multi-agent user interface

Blue Light Corporation

Ningbo, China

Marketing Manager (Feb 2006–Aug 2006)

- Design marketing strategy for south China
- Design pricing system for south China
- Build marketing network in South China

Nanjing University of Aeronautics & Astronautics

Nanjing, China

Research Assistant (Sep 2003-Feb 2006)

- Analyze the industry structure of Jiaozuo City, Henan Province
- Build a dynamic system model with gray system theory
- Design the system goal of the economy development

Henan Polytechnic University

Jiaozuo, China

Faculty (Lecturer), (Jul 2000–Aug 2003)

- Serve as mentor of more than 150 undergraduates
- Participate in multiple research projects

Services

Professional & Community Service

- **Journal Reviewer:** Brain-Computer Interfaces (since 2014), IEEE Computational Intelligence Magazine (CIM) (since 2016), Virtual Reality Journal (since 2016), Neural Computing and Applications (since 2016), Journal of Clean Energy (since 2016), Springerplus (since 2016), International Journal of Industrial Ergonomics (since 2018), Behaviour & Information Technology (since 2019)
- **Conference Proceedings Reviewer:** HFES 2015, HFES 2016, HFES 2017, HFES 2018, HFES 2019
- **Panels:** NSF Reviewer (2016, 2019)
- **Conference Session/Track Chair/Co-chair:** ACTG HFES 2016, CEDM HFES 2016, AHFE 2017, Southwest HFES Symposium 2017

University Service

- Graduate Advisor, Department of Industrial Engineering at Lamar University.
- Faculty Senate, Lamar University
- Advise senior design projects for undergraduate.
- Assist Industrial Engineering Open House to local high school students.
- Assist new faculty hiring in Department of Industrial Engineering at Lamar University.

Affiliates

Human Factor and Ergonomics Society (HFES)

Institute of Industrial Engineers (IIE)

Committee of Safety and Operations in Texas Department of Transportation

TEES (Texas A&M Engineering Experiment Station)

Research Funding

- **Li, Y.**, Liu, X. “Developing A Collaborative UAV Drone System to Enhance the Security in Refineries in Unconstrained Environment and A Case Study in A Medium-Sized Enterprise”, \$3,500, Center for Innovation, Commercialization & Entrepreneurship, Lamar University, 6/2019 - 9/2019.
- **Li, Y.**, Zhang, J. “A Collaborative Unmanned System to Enhance Port Security in Unconstrained Environment”, \$25,000, Center for Advances in Port Management, 4/2019 – 7/2019.
- Zhang, J., Wang, S., **Li, Y.**, “REU: Acquisition of a Hybrid CPU/GPU High Performance Computing Cluster for Research and Education at Lamar University”, \$24,000, National Science Foundation, 9/2018 – 8/2020.
- **Li, Y.**, “Adaptive Image Processing Algorithm in Unconstrained Environment and its applications in UAVs to enhance security”, \$2,500, Center for Innovation, Commercialization & Entrepreneurship, Lamar University, 4/2018 - 8/2018.
- Zhang, J., Wang, S., **Li, Y.**, “MRI: Acquisition of a Hybrid CPU/GPU High Performance Computing Cluster for Research and Education at Lamar University”, \$516,031, National Science Foundation, 9/2017 – 8/2020.
- Xiang, Y., **Li, Y.**, “Integrated Framework of Degradation-based Reliability Modeling and Adaptive Maintenance Logistics”, \$5000, Research Enhancement Grant, Lamar University, 9/2017 – 8/2018.
- **Li, Y.**, Peterson, D., Petroff, N., “Robotic Exoskeleton for Rehab”, \$2,500, Texas A&M Engineering Experiment Station (TEES), 6/2017-6/2018.
- Zhu, W., **Li, Y.**, “3D Printing a Prosthetic Hand for a Rehabilitation System”, \$2,100, Gill Foundation, 6/2016 – 12/2016.
- **Li, Y.**, “Research on Work-Related Musculoskeletal Disorders (MSDs) in Port Industry”, \$28,150, Center for Advances in Port Management, 1/2016 – 7/2017.
- **Li, Y.**, “Develop a Haptically Rendered and Game-Based Science Learning System for People with Visual Impairment”, \$5000, Research Enhancement Grant, Lamar University, 9/2015 – 8/2016.
- Craig, B., Zhu, W., Curry, J., Tokgoz, B., **Li, Y.**, “Mariner Personnel Safety”, \$469,402, American Bureau of Shipping, Summer II, 2015

Graduate Advising

Doctor of Engineering Advisor

- Yi Liu, Doctoral of Industrial Engineering, Lamar University, Since Aug 2019
- Elahe Abbasi, Doctoral of Industrial Engineering, Lamar University, Since Jan 2019
- Acyut Kaneria, Doctoral of Industrial Engineering, Lamar University, Since Aug 2018
- Guanlong Li, Doctoral of Industrial Engineering, Lamar University, Graduated in Aug 2019

Master Thesis Advisor

- Saumil Patel, Master of Industrial Engineering, Lamar University, Since Jan 2019
- Nirupom Paul, Master of Industrial Engineering, Lamar University, Since Aug 2017
- Md Manjurul Ahsan, Master of Industrial Engineering, Lamar University, graduated in Dec 2018
- Saishyam Akurke, Master of Industrial Engineering, Lamar University, graduated in Aug 2018
- Karankumar Modi, Master of Industrial Engineering, Lamar University, graduated in Aug 2018
- Vishnu Mahesh, Master of Industrial Engineering, Lamar University, graduated in Aug 2017
- Yalda Dabiran, Master of Industrial Engineering, Lamar University, graduated in Aug 2017

Master Thesis Committee

- Ruobing Zhao, Master of Computer Science, Lamar University, graduated in Dec 2019
- Zhanbo Zhau, Master of Computer Science, Lamar University, graduated in Dec 2019
- Siva Chamarthy, Master of Chemical Engineering, Lamar University, graduated in Aug 2019
- Santhoshi Kethineedi, Master of Industrial Engineering, Lamar University, graduated in July 2018
- Pratik Pokharel, Master of Civil Engineering, Lamar University, graduated in July 2018
- Bipul Mainali, Master of Civil Engineering, Lamar University, graduated in May 2018
- Sumit Piya, Master of Industrial Engineering, Lamar University, graduated in May 2017
- Prachi Kshirsagar, Master of Electrical Engineering, Lamar University, graduated in May 2017

Doctor of Engineering Committee

- Seyyed Shahin Someeh, Doctoral of Civil Engineering, Lamar University, since Sep 2019
- Masood Jafari Kang, Doctoral of Industrial Engineering, Lamar University, since Sep 2019
- Hacer Varol, Doctoral of Electrical Engineering, Lamar University, graduated in Dec 2018
- Tamaraebi Cleme Atuwu, Doctoral of Industrial Engineering, Lamar University, graduated in Dec 2018
- Mehmet Burak Cankaya, Doctoral of Industrial Engineering, Lamar University, graduated in Aug 2017
- Abrash Abedi, Doctoral of Industrial Engineering, Lamar University, graduated in May 2017

Doctoral of Philosophy Committee

- Anan Wang, Ph.D of Chemical Engineering, Lamar University, graduated in December 2019
- Yan Fang, Ph.D of Chemical Engineering, Lamar University, graduated in August 2018