# YUEQING LI

Associate Professor Director of Human Factors & Ergonomics Lab Office: Cherry 2208 Phone: 409-880-

## **Honors**

University Merit Award, Lamar University (2020)

**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 Economittly(x) OPHVHDUFKQW₩HDUFKQWÀ

*Mar 2006* 

Thesis:

# **Peer-Reviewed Journal Publications**

#### In Press

- 1. Li, G., **Li, Y.**, Craig, B., & Liu, X. (2022). Investigating the effect of contextual factors on driving: An experimental study. *Transportation Research Part F: Traffic Psychology and Behaviour*, 88, 69-80.
- 2. Li, G., Li, Y., Li, Y., Craig, B., & Wu, X. (2021). Investigation of contributing factors to traffic crash severity in Southeast Texas using multiple correspondence analysis. *Journals of Road Safety*, 32(4), 15-28.
- 3. Abbasi, E., **Li, Y.**, Wu, X., & Craig, B. (2021). Using Classification and Regression Trees (CART) to Identify Factors Contributing to Vehicle Crash Severity in a Port City. *International Journal of*

- 3. Dabiran, Y., & Li, Y. The Effect of Music Genre and Tempo on Task Performance. Work.
- 4. Li, Y., Li, G., & Craig, B. A Review of Port-Related Musculoskeletal Disorders (MSDs). *Ergonomics*.
- 5. **Li, Y.**, & Li, G. 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. Evaluation of the flooring effect on lower extremity discomfort during food service tray-line jobs. *Ergonomics*.

In

- 7. Qian C., **Li Y.**, Zuo W., Wang Y. (2019). 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.
- 8. Mhamunkar, M., Bagane, S., Kolhe, L., Stingh, V., Ahuja, M., & **Li, Y.** (2019). Handheld grass cutter machine with supporting wheel. In: Goossens R., Murata A. (eds): *Advances in Social and Occupational Ergonomics*, 228-235, Springer, Cham.
- 9. Patel, J., Madkour, N., Jani, J., Rao, G., Sharma, P., & **Li, Y.** (2019). Ergonomic improvements in heavy-duty four-wheel cart with pelvis support. In: Goonetilleke R., Karwowski W. (eds):

- 9. Abbasi, E., Craig, B., & Li, Y. (2021). The Impact of Using Technologies on Drivers' Attention. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- 10. Torres, J., **Li, Y.**, & Zhang, J. (2021). Investigating Traffic Crashes Involving Autonomous Vehicles. In *Proceedings of the IISE Annual Conference*.
- 11. Liu, Y., Zhao, R., Li, T., & **Li**, **Y.** (2021). An Investigation of the Impact of Autonomous Driving on Driving Behavior in Traffic Jam. In *Proceedings of the IISE Annual Conference*.
- 12. Zhao, R., Liu, Y., **Li, Y., &** Tokgoz, B. (2021). An Investigation of Resilience in Manual and Automatic Driving in Freight Transportation System. *IISE Annual Conference*.
- 13. Zhao, R., Li, Y., & Craig, B. (2021). The Relationship between Smartphone Use and Musculoskeletal Symptoms among University Students during COVID-19 Pandemic Conditions. In *Proceedings of the IISE Annual Conference*.
- 14. Li, T., Zhao, R., Liu, Y., **Li, Y.**, & Li G. (2021). Evaluate the Effect of Age and Driving Experience on Driving Performance with Automated Vehicles. In *Proceedings of the International Conference on Applied Human Factors and Ergonomics*.
- 15. Kang, M.J, Zohoori, S., Abbasi, E., **Li, Y.**, & Hamidi, M. (2020). Predicting the price of second-handed vehicles using data mining techniques. In *Proceedings of the IISE Annual Conference*.
- 16. Li, G., Zhao, R., **Li, Y.**, & Zhang, J. (2020). Towards a Multi-culture Friendly Online Library: an Investigation on the Effect of Wording and Color Contrast. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- 17. Liu, Y., Zhao, R., Li, T., & **Li, Y.** (2020). A Preliminary Investigation of Driver Vigilance in Automated Vehicles in Real Traffic Environments. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*.
- 18. **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.
- 19. 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.
- 20. 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.
- 21. 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.
- 22. 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.
- 23. AkurkeW\*2., &

- 25. 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.
- 26. 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.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. Ilori, A., **Li, Y.**, Mahesh, V., & Craig, B. (2016). Effect of position: An ergonomics evaluation of police wearable equipment. In *Proceedings of 7<sup>th</sup> International Conference on Applied Human Factors and Ergonomics*, 199-207.
- 32. **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*.
- 33. 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.
- 34. **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.
- 35. 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.
- 36. **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.
- 37. 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.
- 38. **Li, Y.**, Nam, C.S., & Choo, Y-G. (2009). Towards optimizing P300 Speller matrix design while decreasing human error. In *Proceedings of 17<sup>th</sup> World Congress on Ergonomics*, Beijing, China.
- 39. Nam, C.S., Johnson, S., & Li, Y. (2008). Environmental Noise and P3000 G[H)5(um)5(an)]TJETQq0.00000912 0 612

- 15. Li, T., Zhao, R., Liu, Y., **Li, Y.**, & Li G. (2021). Evaluate the Effect of Age and Driving Experience on Driving Performance with Automated Vehicles. *International Conference on Applied Human Factors and Ergonomics*.
- 16. Torres, J., **Li, Y.**, & Zhang, J. (2021). Investigating Traffic Crashes Involving Autonomous Vehicles. The Eighth Annual Undergraduate Research & Creative Activity Exhibition, Lama University.
- 17. Zhao, R., Liu, Y., & Li, Y. (2021). Effects of Directional Road Signs Combinations and Language Unfamiliarity on Driving Behavior. The Nineth Annual Texas STEM Conference, Lamar University.
- 18. Zhao, R., & Li, Y. (2021). A Preliminary Evaluation of Drivers' Workload in Partially Automated Vehicles and Conventional Vehicles. The Nineth Annual Texas STEM Conference, Lamar University.
- 19. Patel, S., Li, Y., & Liu, X. (2021). Human Factor and Ergonomics Evaluation of In-Vehicle Touch Screen Infotainment Display. The Nineth Annual Texas STEM Conference, Lamar University.
- 20. Omeroglu, F., & Li, Y. (2021). Effect of Background Music on Task Performance. The Nineth Annual Texas STEM Conference, Lamar University.
- 21. Kang, M.J, Zohoori, S., Abbasi, E., **Li, Y.**, & Hamidi, M. (2020). Predicting the price of second-handed vehicles using data mining techniques. *IISE Annual Conference*.
- 22. Li, G., Zhao, R., **Li, Y.**, & Zhang, J. (2020). Towards a Multi-culture Friendly Online Library: an Investigation on the Effect of Wording and Color Contrast. *Human Factors and Ergonomics Society Annual Meeting*.
- 23. Liu, Y., Zhao, R., Li, T., & **Li, Y.** (2020). A Preliminary Investigation of Driver Vigilance in Automated Vehicles in Real Traffic Environments. *Human Factors and Ergonomics Society Annual Meeting*.
- 24. Liu Y., Li Y., Craig B. (2020). Estimation of Forearm, Deltoid, and Trapezius Muscle Activities Due to Overuse of Smartphone with and Without Armrest. *International Conference on Applied Human Factors and Ergonomics*.
- 25. Abbasi E., Morbale P., Gubbala S.S., **Li Y.**, Craig B. (2020). An Investigation in Muscle Activity of Student's Neck and Back in Various University Rooms. *International Conference on Applied Human Factors and Ergonomics*.
- 26. Zhao R., Zhu Z., **Li Y**., Zhang J., Zhang X. (2020). Use a UAV System to Enhance Port Security in Unconstrained Environment. *International Conference on Applied Human Factors and Ergonomics*.
- 27. Mathiyazhagan, V., Anandhakrishnan, Y., & Li, Y. (2020). An Ergonomic Evaluation of Standard Gaming Mouse and Vertical Mouse. *International Conference on Applied Human Factors and Ergonomics*.
- 28. **Li, Y.**, Kaneria, A., Zhao, X., Manchaiah, V. (2019). Learning Drivers' Behavior Using Social Networking Service. *International Conference on Applied Human Factors and Ergonomics*.
- 29. Qian, C., **Li, Y.**, Zuo, W., Wang, Y. (2019). Analysis of Driving Safety and Cellphone Use Based on Social Media. *International Conference on Applied Human Factors and Ergonomics*.
- 30. Abbasi, E., & **Li, Y.** (2019). An investigation in Beaumont crashes using Classification and Regression Trees Method. *Houston HFES Symposium*, Houston, TX.
- 31. 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. *Houston HFES Symposium*, Houston, TX.
- 32. Patel, S., & **Li, Y.** (2019). Art of collecting data using feedback system in Hospitality Industry. *1*<sup>st</sup> *Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.

- 33. 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. *1st Annual Graduate Research Celebration*, Lamar University, Beaumont, TX.
- 34. Modi, K., & Li, Y. (2018). Evaluation of holographic head-up display to enhance driving safety. *Houston HFES Symposium*, Houston, TX.
- 35. Paul, N., **Li, Y.**, & Craig, B. (2018). Analysis of Muscular Fatigue & Foot Discomfort While Wearing Different Types of Men's Formal Shoes. *Houston HFES Symposium*, Houston, TX.
- 36. Ashan, M., **Li, Y.**, & Gupta, K. (2018). Real Time Face Recognition Under Various Unconstrained Situations. *Houston HFES Symposium*, Houston, TX.
- 37. 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.
- 38. Li, G., Li, Y., & Craig, B. (2018). A systematic review of musculoskeletal disorders (MSDs) among port workers. *International Conference on Applied Human Factors and Ergonomics*.
- 39. 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. *International Conference on Applied Human Factors and Ergonomics*.
- 40. 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. *International Conference on Applied Human Factors and Ergonomics*.
- 41. Akurke, S., & **Li, Y.** (2018). Neck Flexion Angle and User Experience Compared on iPhone X and Samsung S8+. *International Conference on Applied Human Factors and Ergonomics*.
- 42. Paul, N.P., Syed, U. S., Subbarao, K. S., & **Li, Y.** (2017). Manual Breaking System for Skateboards. *Fifth Annual Texas STEM Conference*, Beaumont, TX.
- 43. Li, G. & **Li**, **Y**. (2017). A design feature based comparative evaluation of web maps. *Fifth Annual Texas STEM Conference*, Beaumont, TX.
- 44. Zuo, W., Wang, Y., & **Li, Y.** (2017). An improved grey decision-making model and its application. *Fifth Annual Texas STEM Conference*, Beaumont, TX.
- 45. Mahesh, V., **Li, Y.**, & Craig, B. (2017). Effect of flooring on lower extremity discomfort during food service tray-line j00913 Tm0 g0 G() TJETQ EMC /P &MCID 7>BDC q0.00000912 0 612 792 reW\*nBT/F304 Tf1 0 0 1 12

51. Yesodha, K., Narasimhan, V., Li, Y., & Criag, B. (2017). Ergonomic Evaluation of Videogame Controllers.

- 15. Ashan, M., & Li, Y. (2017). Real Time Facial Recognition in Unconstrained Environment. In *Fifth Annual Texas STEM Conference*, Beaumont, TX.
- 16. Syed, U., Kanaparthi, S., Paul, N., Treesha, M., **Li, Y.**, Craig, B. (2017). Evaluation of a skateboard manual breaking system. In Southwest HFES Symposium, June 9, 2017, San Antonio, TX.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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

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

- Develop vabrotactile-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
- •

• Conference

- Foundation, 9/2018 8/2021.
- 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 Found

- Zanbo 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