# 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

- 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 Ergonomic*[, TX/(.)][TJETQQ.0

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