Professor, PhD, PEng., FEIC, FCAE
Electrical and Computer Engineering
Dalhousie University, Halifax, Nova Scotia
Canada B3J 2X4

Cross Appointment
School of Biomedical Engineering &
Faculty of Computer Science
Dalhousie University, Halifax, Nova Scotia

(902) 494-3163 (902) 422-7535
jason.gu@dal.ca, jason.gu@ieee.org
http://www.jasongu.org/

Electrical & Computer Engineering, University of Alberta, Canada

Biomedical & Instrumentation Eng., Shanghai Jiaotong University, China

Electrical Engineering & Information Science (Special Class for the Young Gifted, 1987-1990), University of Science and Technology of China, China

RESEARCH PROJECT

1. 2024, Wearable Technology for Monitoring Neurological Conditions in Neurodegenerative Disorders, *Mitacs*, $30,000, PI.
2. 2023-2030, Qanittaq Clean Arctic Shipping, *CFREF*, $1000,000, CO-App.
3. 2023-2028, Optimal State Convergence Controllers with Graph Communication for Tele-operation, *NSERC/ Discovery Grant*, $235,000, PI.
4. 2023, Development of a smart wearable device using sensor fusion for human motion tracking, *Mitacs*, $15,000, PI.
5. 2021-2022, Diagnostic and Monitoring Tool for Amputee Patients Wearing a Prosthesis, *Mitacs*, $10,0000, PI.
6. 2019-2025, Interdisciplinary Marine Engineering Research and Industrial Training, *NSERC CREATE*, $1,650,000, PI.
7. 2017-2022, Sensing and Control of Multiple Mobile Manipulator, *NSERC/Discovery Grant*, $235,000, PI.

---

1. Fiseha B. Tesema, Jason Gu, Wei Song, Hong Wu, Shiqiang Zhu, Zheyuan Lin, Min Huang, Wen Wang, and Rajesh Kumar, "Addressee Detection Using Facial and Audio Features in Mixed Human?Human and Human–Robot Settings: A Deep Learning Framework", .
2. Yingkang Xie, Qian Ma, Jason Gu and Guopeng Zhou, "Event-Triggered Fixed-Time Practical Tracking Control for Flexible-Joint Robot", IEEE Transactions on Fuzzy Systems, page 1-10, June 10 2022.
3. Ruiqi Fu, Yifeng Chen, Yongqi Huang, Shuping Chen, Feiyan Duan, Jiewei Li, Jianhui Wu, Dongmei Jiang, Junling Gao, Jason Gu, Mingming Zhang and Chunqi Chang, "Symmetric Convolutional and Adversarial Neural Network Enables Improved Mental Stress Classification from EEG",
4. Muhammad Sabih, Muhammad Umer, Umar Farooq, Jason Gu, Marius M. Balasc, Muhammad Usman Asad, Khurram Karim Qureshi, Irfan A. Khan and Ghulam Abbas, "Image processing based fault classification in power systems with classical and intelligent techniques", .
5. Hao Chen, Rui Nie, Jason J. Gu, Shuang Yan, and Renming Zhao, "Efficiency Optimization Strategy for Switched Reluctance Generator System with Position Sensorless Control",
6. Shang Shi, Jason Gu, Shengyuan Xu and Huifang Min, "Globally Fixed-Time High-Order Sliding Mode Control for New Sliding Mode Systems Subject to Mismatched Terms and Its Application",
7. Shang Shi, Jason Gu, Shengyuan Xu and Huifang Min, "Variable-Gain Second-Order Sliding Mode Controller With Globally Fixed-Time Stability Guarantees",