# SHI-ANG QI

University of Alberta, Edmonton, Alberta, Canada, T6H 1H9 (+1) 587-937-7555 \( \shinag@ualberta.ca \( \shittps://shi-ang.github.io/ \)

#### **EDUCATION**

University of Alberta, Edmonton
Ph.D. in Computer Science
University of Alberta, Edmonton

M.Sc. in Electrical and Computer Engineering

Huazhong University of Science and Technology

B.Eng. in Biomedical Engineering

Sep. 2020 - Present GPA: 3.9/4.0

Sep. 2016 - May 2020

GPA: 3.6/4.0 Sep. 2012 - Jun. 2016

GPA: 3.4/4.0

## **PUBLICATIONS**

- Shi-ang Qi, Neeraj Kumar, Ruchika Verma, Jian-Yi Xu, Grace Shen-Tu, Russell Greiner, "Using Bayesian Neural Networks to Select Features and Compute Credible Intervals for Personalized Survival Prediction." IEEE Transactions on Biomedical Engineering (2023).
- Yakun Yu, Mingjun Zhao, **Shi-ang Qi**, Feiran Sun, Baoxun Wang, Weidong Guo, Xiaoli Wang, Lei Yang, Di Niu. "ConKI: Contrastive Knowledge Injection for Multimodal Sentiment Analysis." Findings of Annual Meeting of the Association for Computational Linguistics (ACL) 2023
- Shi-ang Qi, Neeraj Kumar, Mahtab Farrokh, Weijie Sun, Li-Hao Kuan, Rajesh Ranganath, Ricardo Henao, Russell Greiner. "An Effective Meaningful Way to Evaluate Survival Models." International Conference of Machine Learning (ICML) 2023.
- Zehra Shah, Shi-ang Qi, Fei Wang, Mahtab Farrokh, Mashrura Tasnim, Eleni Stroulia, Russell Greiner, Manos Plitsis, Athanasios Katsamanis. "Exploring Language-Agnostic Speech Representations using Domain Knowledge for Detecting Alzheimer's Dementia." In ICASSP 2023-2023 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), pp. 1-2. IEEE, 2023.
- Shi-ang Qi, Neeraj Kumar, Jian-Yi Xu, Jaykumar Patel, Sambasivarao Damaraju, Grace Shen-Tu, and Russell Greiner. "Personalized breast cancer onset prediction from lifestyle and health history information." *Plos one* 17, no. 12 (2022): e0279174.
- Neeraj Kumar\*, Shi-ang Qi\*, Li-Hao Kuan, Weijie Sun, Jianfei Zhang, and Russell Greiner. "Learning accurate personalized survival models for predicting hospital discharge and mortality of COVID-19 patients." Scientific reports 12, no. 1 (2022): 1-11.
- Shi-ang Qi\*, Qian Wu\*, Zhenpu Chen, Wei Zhang, Yongchun Zhou, Kaining Mao, Jia Li et al. "High-resolution metabolomic biomarkers for lung cancer diagnosis and prognosis." *Scientific reports* 11, no. 1 (2021): 1-10.
- Zehra Shah, Jeffrey Sawalha, Mashrura Tasnim, **Shi-ang Qi**, Eleni Stroulia, and Russell Greiner. "Learning language and acoustic models for identifying alzheimers dementia from speech." *Frontiers in Computer Science* (2021): 4.
- Shiang Qi, and Jie Chen. "Safety Assessment of a Wearable Low-Intensity Pulsed Ultrasound Device for Relieving Mental Illness Symptoms" In 2020 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp. 5240-5243. IEEE, 2020.
- Xiaoxue Jiang, Oleksandra Savchenko, Yufeng Li, **Shiang Qi**, Tianlin Yang, Wei Zhang, and Jie Chen. "A review of low-intensity pulsed ultrasound for therapeutic applications." *IEEE Transactions on Biomedical Engineering* 66, no. 10 (2018): 2704-2718.

• Shiang Qi, Yufeng Li, Wei Zhang, and Jie Chen. "Design of a novel wearable lipus treatment device for mental health treatment." In 2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp. 6052-6055. IEEE, 2018.

## **HONORS**

• Graduate Recruitment Scholarship, \$5,000

• Mitacs Accelerate Scholarship, \$25,000/year 2019

• Excellent Student Leader at Huazhong University of Science and Technology (3%) 2014

• Public Welfare Scholarship at Huazhong University of Science and Technology (2%) 2013 & 2014

• Freshman Scholarship, Excellent League Member, Excellent Student in Science and Technology Innovation Activity at Huazhong University of Science and Technology 2013

## **SKILLS**

Algorithms ML/DL, Survival Analysis, Explainable AI, Causal Inference

Programming Languages Python, R, SQL, C, Java, MATLAB
Libraries PyTorch, Keras, TensorFlow, Scikit-learn

## PROFESSIONAL SERVICE

Reviewer (Conference/Journal)

C ICDM (2021), NeurIPS (2023)

J IEEE TBioCAS (2017), IEEE JTEHM (2019), AIJ (2022)

## CHALLENGES/COMPETITIONS

## ICASSP 2023 SPGC Challenge

Multilingual Alzheimer's Dementia Recognition through Spontaneous Speech

The ADReSS Challenge Ranking: 3-rd Globally in Classification task

Ranking: 4-th Globally

Alzheimer's Dementia Recognition through Spontaneous Speech

## TEACHING ASSISTANCE EXPERIENCE

<b>CMPUT 261</b>	Introduction to Artificial Intelligence	Fall 2022
CMPUT 366	Intelligent Systems	Winter 2021/2022
CMPUT 101	Introduction to Computing	Fall 2020
ECE 212	Introduction to Microprocessors	Winter 2020
ENCMP 100	Computer Programming for Engineers	Winter 2019
ECE 312	Embedded System Design	Fall 2018/2019
ECE 340	Discrete Time Signals and Systems	Fall 2017

Last modified date: 2023/07/08