

Xiaoran Zhang

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EDUCATION

University of California, Los Angeles

M.S. in Electrical and Computer Engineering GPA: 3.94/4.0

- Courses: Neural Networks and Deep Learning (A^+), Linear Programming (A), Convex Optimization (A), Large Scale Optimization (A), Computational Imaging (A^-), Reinforcement Learning.

Los Angeles, California

Sep. 2019 – Present

Beijing Institute of Technology

B.Eng. in Automatic Control GPA: 91.57/100 Ranking: 2/36

- Xu Teli Special Fellowship (highest honor for undergrad).

Beijing, China

Sep. 2015 – Jun. 2019

RESEARCH EXPERIENCE

UCLA ECE The Ozcan Research Group

Advisor: Prof. Yair Rivenson

- Proposed and developed a 2D unsupervised and weakly-supervised deep learning-based non-rigid image registration framework.

Los Angeles, USA

Oct. 2019 – Present

BIT Institute of Automation & Peking University Third Hospital

Advisor: Prof. Dawei Shi and Dr. Yan Li

- Designed a automatic tool for 2D MRI spinal cord segmentation using CNN and active contour propagation.

Beijing, China

Feb. 2019 – Sep. 2019

BIT Institute of Automation

Advisor: Prof. Dawei Shi

- Designed a calibration algorithm for subcutaneous continuous glucose monitoring sensors with reduced calibration frequency and computation complexity.

Beijing, China

Nov. 2018 – Feb. 2019

University of Alberta Mazankowski Alberta Heart Institute

Advisor: Prof. Kumaradevan Punithakumar and Prof. Michelle Noga

- Designed a fully automatic segmentation approach for 2D MRI cardiac images using CNN and unscented Kalman filter.

Edmonton, Canada

July 2018 – Feb. 2019

PUBLICATIONS

- [1] **Xiaoran Zhang**, Michelle Noga, David Glynn Martin, and Kumaradevan Punithakumar. Fully automated left atrium segmentation from anatomical cine long-axis MRI sequences using deep convolutional neural network with unscented Kalman filter. *Under Review*, 2020.
- [2] **Xiaoran Zhang**, Yan Li, Yicun Liu, Shu-xia Tang, Xiaoguang Liu, Kumaradevan Punithakumar, and Dawei Shi. Automatic spinal cord segmentation from axial-view MRI slices using CNN with grayscale regularized active contour propagation. *Submitted*, 2020.
- [3] **Xiaoran Zhang**, Wan Zhang, Yongtong Cao, Dawei Shi, and Ling Shi. Optimal continuous glucose monitoring sensor calibration for patients with type 1 diabetes. In *2019 IEEE 28th International Symposium on Industrial Electronics (ISIE)*, pages 617–622. IEEE, 2019.
- [4] **Xiaoran Zhang**, David Glynn Martin, Michelle Noga, and Kumaradevan Punithakumar. Fully automated left atrial segmentation from MR image sequences using deep convolutional neural network and unscented kalman filter. In *2018 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*, pages 2316–2323. IEEE, 2018.
- [5] **Xiaoran Zhang**, Yuting Bai, and Senchun Chai. State estimation for GPS outage based on improved nonlinear autoregressive model. In *2018 IEEE 9th International Conference on Software Engineering and Service Science (ICSESS)*, pages 840–843. IEEE, 2018.

AWARDS

Xute Li Special Fellowship (highest honor for undergrad, 9/all undergraduates), by BIT	2019
Graduate with 1st Class Honor, by BIT and Beijing Municipal Education Commission	2019
Mitacs Award for Outstanding Innovation-Undergraduate (1/all Mitacs interns), by Mitacs	2018
Meritorious Winner in ICM/MCM (8.88%), by COMAP	2018
National Scholarship (1/36), by the Ministry of Education of the People's Republic of China	2016
Beijing Triple 'A' Outstanding Student Award (1/320), by Beijing Municipal Education Commission	2016
Three times 1st Class Scholarship (1/36), by BIT	2015, 2016