

Youzhi Luo

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Education

- Ph.D. in Computer Science Aug 2019 – Present
Texas A&M University, College Station, TX
- B.Eng. Sep 2015 – Aug 2019
University of Science and Technology of China

Major Research Themes

Machine Learning, Data Mining, Computational Chemistry

Selected Research Projects

Molecule Property Prediction

1. Our team (DIVE) is ranked #1 on the AI Cures open challenge for COVID-19.
2. Implement a chemical property predictor with BERT (a self-attention based deep neural network) and achieve comparable performance with state-of-the-art methods in MoleculeNet datasets and AI Cures open challenge.

EM Image Segmentation and Reconstruction

1. Implement an automatic neuron segmentation system for electron microscopy images, with a UNet (a deep convolutional neural network) based edge detector and using watershed algorithm for post processing.
2. Test the system on the neuron segmentation tasks of the MICCAI Challenge on Circuit Reconstruction from Electron Microscopy Images (CREMI), and achieve comparable performance with state-of-the-art methods in sample C.

Professional Services

Conference Reviewer

- ACM SIGKDD Conference on Knowledge Discovery and Data Mining(KDD) 2020