Xinming Tu

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EDUCATION

University of Washington Seattle, USA PhD student in Computer Science & Computational Molecular Biology; Sep 2021 - Present

Advisor: Sara Mostafavi

Peking University Beijing, China Sep 2016 - June 2021

Bachelor of Biological Science & Computer Science Undergraduate Honors Program in Biology

EXPERIENCE

Yale University New Heaven, USA Center for Statistical Genomics and Proteomics (Hongyu Zhao Lab) July 2019 - Sep 2019

Microsoft Research Asia

Beijing, China Machine Learning and Computational Biology Group Oct 2019 - Apr 2020

University of Washington

Remote Summer Intern(Sheng Wang Lab)

Seattle, USA July 2020 - Sep 2020

Publication

- CLUE: Xinming Tu*, Zhi-jie Cao*, Chen-rui Xia, Sara Mostafavi†, Ge Gao†. Cross-Linked Unified Embedding for cross-modality representation learning, NeurIPS, 2022 (Oral Presentation)
- vCNN: Shen Jin*, Jing-Yi Li*, Xin-Ming Tu, Yang Ding[†], and Ge Gao[†]. Effectively detect bio-motif via a new convolution model with adaptive kernel length, Briefs in Bioinformatics, 2021
- ePooling: Xiao Luo*, Xin-Ming Tu*, Yang Ding, Ge Gao†, Minghua Deng† Expectation pooling: An effective and interpretable method of pooling for predicting DNA-protein binding, Bioinformatics, 2020
- Kernel2Pwm: Yang Ding, Jing-Yi Li, Meng Wang, Xin-Ming Tu, Ge Gao. An exact transformation of convolutional kernels enables accurate identification of sequence motifs, Biorxiv, 2019

Honors and Awards

Paul G. Allen First-Year Graduate Student Fellowship	2021
• ShenTong Graduates (Highest Graduate honor of School of Life Science)	2021
• Outstanding Graduates of Peking University	2021
• Outstanding Graduates of Beijing, China	2021
• Merit Student in Peking University	2019
• May Fourth Scholarship in Peking University	2018
• Academic Excellence Award in Peking University	2018
\bullet The 32^{th} Chinese Mathematical Society (CMS) 1^{st} prize	2015
\bullet The 20^{th} National Olympiad in Informatics in Provinces(NOIP) 1^{st} prize	2014

SKILLS SUMMARY

- Languages: Python(TensorFlow, Keras, PyTorch), C, MATLAB, R, Shell, LATEX
- Tools: Linux, Git, Slurm