

YANGYANG LI

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SELF-INTRODUCTION

I am intensely interested in the data-driven domains including classic machine learning and deep learning. I am also an engineer and I am mainly working on developing algorithms and software to handle problems on Genomics, Transcriptomics.

EDUCATION

Northwestern University

Ph.D in Bioinformatics

Chicago, US

June. 2022 – present

University of Minnesota

Ph.D. in Bioinformatics and Computational Biology

Minnesota, US

Sep. 2020 – June. 2022

China Agricultural University

Master in Crop Bioinformatics

Beijing, CN

Sep. 2018 – June 2020

Northeast Agricultural University

Bachelor of Arts in Agronomy

Harbin, CN

Sep. 2014 – June 2018

RESEARCH EXPERIENCE AND PROJECT

University of Minnesota

Ph.D. in Bioinformatics and Computational Biology

Minnesota, US

Sep. 2020 – Present

- Develop algorithm and deep learning model to emulate long-read sequencer
- Develop a tool to assemble whole Transcript for long-read data
- Compare the performance of current tools used to detect alternative splicing variants

China Agricultural University

Master in Crop Bioinformatics

Beijing, CN

Sep. 2018 – June 2020

- Dissection of 1,400 genomics data, extracted from eight maize populations. I adapt the bin map method to construct high-density genetic maps suitable for QTL mapping and detection, which regulate multiple, important agronomical traits.
- Conducting Genome-Wide Association Analysis (GWAS) to determine the association between SNPs and maize ear traits in 450 natural populations.

TECHNICAL SKILLS

Languages and Frameworks: C/C++, Python, R, Pytorch

Developer Tools: Git, Docker, TravisCI, PyCharm, Clion, VS Code, Vim, Linux, Gcc, Clang

Specializations: Software and Algorithm Development, Concurrency, Data Analysis and Visualization, Natural Language Processing

GRANTS AND HONORS

- Second Prize of Academic Scholarship (2019)
- Agricultural Scholarship (2016)
- Encouragement Scholarship (2014)

CONFERENCE TALK

- The 7th Mathematical, Computer and Life Sciences Interdisciplinary Young Scholars Forum

PUBLICATIONS

Fry, J. P., Li, Y. Y., & Yang, R. D. (2022, 3). ScanExitronLR: characterization and quantification of exitron splicing events in long-read RNA-seq data (In Review). *bioRxiv*, 1(1), 1–7. doi: 10.1101/2022.03.25.485864