Linhua Wang

Bioinformatician

Interested in developing computational models for a better understanding of biology and disease.

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EDUCATION

M.S., Computational Biology
Carnegie Mellon University

08/2015 – 05/2017 *Pittsburgh, PA*

Selected Courses

- Concepts of Mathematics
- Computational Molecular Biology
- Machine Learning
- Biological Modeling and Simulation

B.S., Biotechnology
Sun Yat-sen University

09/2011 – 06/2015 *Guangzhou, China*

Selected Courses

- Molecular Biology
- Biostatistics
- Tumor Biology
- Genetics

SKILLS

Machine Learning | Protein Function Prediction | Software Construction | Deep Learning | Linux | Molecular Biology | High-performance Computing | Python | Java | R | MATLAB

PUBLICATIONS AND CONFERENCES

Method Article

Large-scale protein function prediction using heterogeneous ensembles

Author(s)

Linhua Wang, Jeff Law, Shiv D. Kale, T. M. Murali and Gaurav Pandey.

09/28/2018

F1000Research 2018, 7(ISCB Comm J):1577

Conference Talk

Large-scale assessment of protein function prediction using heterogeneous ensembles

Presenter

Linhua Wang

07/06/2018

The 26th Intelligent Systems for Molecular Biology (ISMB).

RESEARCH EXPERIENCE

Bioinformatician
Icahn School of Medicine at Mount Sinai

08/2017 – Present *New York, NY*

Achievements/Tasks

- Developed machine learning frameworks for the prediction of various biomedical targets including protein function.
- Incorporated semantic similarity to further enhance our models' performance for predicting gene ontology terms.
- Compared the computational cost between a traditional high-performance computing platform and Spark for processing big biomedical and biological data.

Research Assistant Intern
University of Pittsburgh

05/2016 – 08/2016 *Pittsburgh, PA*

Achievements/Tasks

- Applied a Bayesian causal network to investigate gene-specific hypermethylation in tumorigenesis of lower grade glioma and glioblastomas.
- Analyzed and visualized the results using R packages.

Laboratory Assistant
Beijing Genomics Institute

06/2013 – 07/2013 *Guangzhou, China*

Achievements/Tasks

- Prepared patients' DNA libraries from blood samples for DNA sequencing.
- Ran software to do sequence alignments for the identification of potential pathogens that caused diseases.
- Generated diagnostic reports of pathogen risk for hospitals.

HONOR AWARDS

F1000Research Outstanding Presentation Prize at ISMB (07/2018)
F1000Research

Function COSI (ISMB) Travel Fellowship (07/2018)
Intelligent Systems for Molecular Biology (ISMB)

MSCB Fellowship (08/2015 – 06/2017)
Master School of Computational Biology at Carnegie Mellon University

National Student Scholarship (2013 – 2014)
Sun Yat-sen University