Cong Ma

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EDUCATION

Carnegie Mellon University *2015 - Present*
Ph.D. in Computational Biology
Advisor: Carl Kingsford

Zhejiang University *2011 - 2015*
BS Applied Mathematics

EMPLOYMENT

Internship at Bristol Myers Squibb *Jun 2018 - Aug 2018*
Translational Bioinformatics-Single Cell Sequencing Analyses Intern Program

PUBLICATION

1. Cong Ma and Carl Kingsford. Estimating mutual information under measurement error. *BioRxiv*, page 852384, 2019
2. Cong Ma, Hongyu Zheng, and Carl Kingsford. Finding ranges of optimal transcript expression quantification in cases of non-identifiability. *BioRxiv*, 2019
3. Cong Ma and Carl Kingsford. Detecting, categorizing, and correcting coverage anomalies of rna-seq quantification. *Cell Systems*, 9(6):589–599, 2019
4. Yutong Qiu, Cong Ma, Han Xie, and Carl Kingsford. Detecting Transcriptomic Structural Variants in Heterogeneous Contexts via the Multiple Compatible Arrangements Problem. In *19th International Workshop on Algorithms in Bioinformatics (WABI 2019)*, volume 143, pages 18:1–18:19, 2019
5. Cong Ma, Mingfu Shao, and Carl Kingsford. SQUID: transcriptomic structural variation detection from RNA-seq. *Genome Biology*, 19(1):52, 2018
6. Fan Wu, Cong Ma, and Cheemeng Tan. Network motifs modulate druggability of cellular targets. *Scientific Reports*, 6, 2016

TALK & POSTER

- Cong Ma. SQUID: Transcriptomic structural variation detection from RNA- seq. *ISMB*, 2018
- Cong Ma. SQUID: Transcriptomic structural variation detection from RNA- seq. *Genome Informatics*, 2017
- Cong Ma and Carl Kingsford. Detecting anomalies in RNA-seq quantification. *RECOMB*, 2019

TEACHING

TA for 02712 Computational Methods for Biological Modeling and Simulation *Fall 2016*
TA for 02710 Computational Genomics *Spring 2017*

ACADEMIC SERVICE

conference reviewer: RECOMB'15, RECOMB'16, WABI'16, RECOMB'17, RECOMB-CCB'17, ISMB'17, RECOMB'18, ISMB'18, RECOMB'19, ISMB'19, RECOMB'20
journal reviewer: Plos Compbio, Cell Systems
CPCBGSA: senate for 2017 - 2019

AWARDS

Graduate Student Assembly/Provost Conference Funds (CMU) *2019*
ISMB travel fellowship *2018*
Outstanding Academic Achievement (CPCB Program) *2016*