

# Hao Tian

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EDUCATION	<b>Southern Methodist University</b> , Dallas, Texas, USA	Aug 2019 – Now
	<ul style="list-style-type: none"><li>▪ Ph.D. in Theoretical and Computational Chemistry<ul style="list-style-type: none"><li>• Adviser: Prof. Peng Tao</li><li>• Cumulative GPA: 3.95 / 4.0</li></ul></li></ul>	
	<b>Georgia Tech</b> , Atlanta, Georgia, USA	Aug 2020 – Now
	<ul style="list-style-type: none"><li>▪ M.S. in Computer Science<ul style="list-style-type: none"><li>• Specialization: Computing Systems</li><li>• Cumulative GPA: 4.0 / 4.0</li></ul></li></ul>	
	<b>Beijing University of Chemical Technology</b> , Beijing, China	Aug 2015 – Jun 2019
	<ul style="list-style-type: none"><li>▪ B.Eng. in Chemical Engineering<ul style="list-style-type: none"><li>• Cumulative GPA: 3.49 / 4.33</li></ul></li></ul>	
RESEARCH EXPERIENCE	<b>Center for Research Computing,</b> <b>Center for Drug Discovery, Design, and Delivery (CD4)</b> Department of Chemistry, Southern Methodist University Graduate Research Assistant Focus: <ul style="list-style-type: none"><li>• Molecular dynamics of biomacromolecules</li><li>• Decipher protein allostery through machine learning based methods</li><li>• Machine learning and database based allostery development</li></ul>	Aug 2019 – Now
PUBLICATIONS	<ul style="list-style-type: none"><li>[5] <a href="#">Hao Tian</a>, Xi Jiang and Peng Tao. PASSer: Prediction of Allosteric Sites Server. <i>ChemRxiv Preprint</i>, 2020.</li><li>[4] Zilin Song, Hongyu Zhou, <a href="#">Hao Tian</a>, Xinlei Wang and Peng Tao. Unraveling the energetic significance of chemical events in enzyme catalysis via machine-learning based regression approach. <i>Communications Chemistry</i>, 2020, 3, 134.</li><li>[3] <a href="#">Hao Tian</a>, Francesco Trozzi, Brian Zoltowski and Peng Tao. Deciphering the Allosteric Process of Phaeodactylum tricornutum Aureochrome 1a LOV Domain. <i>The Journal of Physical Chemistry B</i>, 2020, 124, 41, 8960–8972.</li><li>[2] <a href="#">Hao Tian</a> and Peng Tao. ivis Dimensionality Reduction Framework for Biomacromolecular Simulations. <i>Journal of Chemical Information and Modeling</i>, 2020, 60, 10, 4569-4581.</li><li>[1] <a href="#">Hao Tian</a> and Peng Tao. Deciphering the Protein Motion of S1 Subunit in SARS-CoV-2 Spike Glycoprotein Through Integrated Computational Methods. <i>Journal of Biomolecular Structure and Dynamics</i>, 2020.</li></ul>	
PROJECTS	getarticle, an open source Github repository, star: 22, downloads: 5k <ul style="list-style-type: none"><li>• A package based on SciHub and Google Scholar that can download articles given DOI, website address or keywords;</li><li>• Imported in Python or used as command line.</li></ul> PASSer: Protein Allosteric Sites Server, <a href="http://passer.smu.edu">passer.smu.edu</a> <ul style="list-style-type: none"><li>• A web server to predict allosteric sites given protein PDB ID or PDB file;</li><li>• Implemented using Django framework and JSmol;</li><li>• Learn both physical properties through XGBoost model and pocket topology through graph convolutional network.</li></ul>	
AWARDS & SCHOLARSHIPS	<b>Outstanding Teaching Assistant</b> Southern Methodist University	May 2020
	<b>Meritorious Winner of Mathematical Contest in Modeling</b> Beijing University of Chemical Technology	Mar 2018

	<b>Outstanding Undergraduate</b> Beijing University of Chemical Technology	Sep 2015
<b>INVITED TALKS</b>	<b>Machine Learning Framework for Deciphering the Allosteric Process of Circadian Clock Protein</b> Department of Chemistry and Biochemistry, The University of Oklahoma	Dec 2020
<b>LEADERSHIP &amp; SERVICES</b>	<b>Diversify Protein Science</b> Member  <b>Living Journal of Computational Molecular Sciences</b> Student reviewer	
<b>SKILLS</b>	Programming languages: Python, Java, Bash, JavaScript, PHP, SQL Skill stacks: HTML, CSS, jQuery, Git Machine learning packages: Scikit-learn, Keras, PyTorch	

*[Last updated on 2020-12-12]*