

Jeffrey Chang

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Education	B.S. candidate in Physics, Stanford University Current GPA: 4.02 (in major: 4.08)	2020 (expected)
	Lynbrook High School GPA: 4.40, <i>Valedictorian</i>	2016
Awards	Stanford Bio-X Best Undergraduate Poster Award	2018
	US National Science Bowl 2nd place team captain	2016
	California State Science Fair 2nd place	2016
	US Physics Olympiad Semifinalist	2016
	USA Computing Olympiad Platinum Division	2015
	Jessica Saal Fellowship Award	2015
Career	<i>Textbook Author</i> , with Prof. Steve A. Kivelson and Jack M. Jiang	2019–Present
	• Writing an undergraduate-level textbook on the statistical mechanics of phase transitions	
	<i>Researcher</i> , Stanford Dept. of Chemistry, Boxer Lab	2017–2019
	• X-ray crystallography of fluorescent proteins to probe the photochemistry of biological chromophores	
	<i>Scientific Software Engineer</i> , Schrodinger, Inc.	2017
	• Coded a python GUI for aligning and visualizing proteins and overhauled a critical part of the existing software architecture	
	<i>Science Educator</i> , Springlight Education	2015–2016
	• Designed curriculum and taught high-school level classes on physics, chemistry, and biology	
	<i>Researcher</i> , Stanford School of Medicine, Khatri Lab	2015
	• Semi-supervised machine learning of mRNA microarray data to predict autoimmune drug response	
	<i>Researcher</i> , Stanford Dept. of Linguistics, with Prof. Penelope Eckert	2015
	• Sociolinguistic fieldwork to measure the California Vowel Shift in Bay Area teenagers	
Funding	Stanford Undergraduate Research and Advising Small Grant	2019
	Stanford Bio-X Undergraduate Summer Research Program	2018
	Stanford Institutes of Medical Research Summer Research Program	2015
Publications	“Structural Evidence of Photoisomerization Pathways in Fluorescent Proteins”, J. Chang, M. G. Romei, S. G. Boxer, <i>Journal of the American Chemical Society</i> , 141 , 15504-15508 (2019). [link]	
Interests	<i>Chamber Music</i> . Financial officer of the Stanford Collaborative Orchestra [link]	
	<i>Music Composition</i> . Horn sonatas, wind quintets, jazz tunes, and more [link]	
	<i>French Horn</i> . Four years principal horn experience, ringer for local orchestras	
	<i>Jazz piano</i> . Active gigging musician with the Casual Business jazz combo	
	<i>French</i> . Fluent speaker with four years of coursework	