

jeffjar@stanford.edu — <https://stanford.edu/~jeffjar>

jeffjar@stanford.edu — <https://stanford.edu/~jeffjar>

B.S. candidate in Physics, Stanford University
Current GPA: 4.02 (in major: 4.08)

2020 (expected)

Lynbrook High School
GPA: 4.40, *Valedictorian*

2016

Stanford Bio-X Best Undergraduate Poster Award
US National Science Bowl 2nd place team captain
California State Science Fair 2nd place
US Physics Olympiad Semifinalist
USA Computing Olympiad Platinum Division
Jessica Saal Fellowship Award

2018

2016

2016

2016

2015

2015

Textbook Author, with Prof. Steve A. Kivelson and Jack M. Jiang

2019–Present

- Writing an undergraduate-level textbook on the statistical mechanics of phase transitions

Researcher, Stanford Dept. of Chemistry, Boxer Lab

2017–2019

- X-ray crystallography of fluorescent proteins to probe the photochemistry of biological chromophores

Scientific Software Engineer, Schrodinger, Inc.

2017

- Coded a python GUI for aligning and visualizing proteins and overhauled a critical part of the existing software architecture

Science Educator, Springlight Education

2015–2016

- Designed curriculum and taught high-school level classes on physics, chemistry, and biology

Researcher, Stanford School of Medicine, Khatri Lab

2015

- Semi-supervised machine learning of mRNA microarray data to predict autoimmune drug response

Researcher, Stanford Dept. of Linguistics, with Prof. Penelope Eckert

2015

- Sociolinguistic fieldwork to measure the California Vowel Shift in Bay Area teenagers

In review. J. Chang, M. G. Romei, S. G. Boxer. “Structural Evidence of Photoisomerization Pathways in Fluorescent Proteins”. [ChemRxiv]

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

Chamber Music. Financial officer of the Stanford Collaborative Orchestra [\[link\]](#)

Music Composition. Horn sonatas, wind quintets, jazz tunes, and more [link]

French Horn. Four years principal horn experience, ringer for local orchestras

Jazz piano. Active gigging musician with the Casual Business jazz combo

French. Fluent speaker with four years of coursework