

EDUCATION

University of California, Berkeley (2019–2024, anticipated)

Ph.D. Candidate | [Materials Science and Engineering](#) (MSE), advised by Professor [Mark Asta](#) | GPA: 4.000

Stanford University (2014–2018)

M.S. | [Computational and Mathematical Engineering](#) (CME) | GPA: 3.970

B.S. | [Materials Science and Engineering](#) (MSE), with Honors, with Distinction | GPA: 3.965

SKILLS AND AWARDS

- Pedagogical content knowledge in physical science domains with experience in instructional design.
 - Experience writing digital textbooks using Jupyter, L^AT_EX, Inkscape, and other tools. Examples in [QM](#), [MI](#).
 - 2020 [National Science Foundation Graduate Research Fellowship](#) (NSF GRFP) worth a total of \$138,000.
 - 2022 UC Berkeley [Outstanding Graduate Student Instructor Award](#).
 - Awarded two curriculum development grants worth a total of \$1,500.
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TEACHING EXPERIENCE

Graduate Student Instructor for [MSE 45](#) and [MSE 104](#) (Berkeley, CA) 08/2021—05/2022

- MSE 45 (Fall 2021): Designed lab lectures and taught labs about introductory MSE concepts. Also held OH and assisted with the overall course (~ 160 students). *Overall effectiveness: 4.8/5.0* ($n = 34$).
- MSE 104 (Spring 2022): Designed lab lectures and taught labs about materials characterization. Also held OH and assisted with the overall course (~ 90 students).

Research internship mentor for [LBNL MSD DEI](#) initiative (Berkeley, CA) 06/2021—07/2021

- Designed an original, open-source [materials informatics \(MI\) curriculum](#) using [Jupyter Book](#).
- Mentored six undergraduate researchers in using MI techniques for data-driven discovery of high- κ dielectrics.
- *Spotlight presentation* at the 2021 MRS Fall Meeting ([BI01.02.01](#)) and *first-author* manuscript in preparation.

Instructional Designer (ID) at [Citrine Informatics](#) (Redwood City, CA) 01/2019—07/2019

- Contributed towards open-source [MI learning tools](#) using Jupyter notebooks.
- Forthcoming Material Matters commentary article in [MRS Bulletin](#).
- Designed 2 days of MI curricula and 7 interactive training sessions for industrial customers.
- Created a pedagogical framework to develop an ID team and strengthen group collaboration.

Teaching Assistant for [CME 100](#) and [CME 104](#) math classes (Stanford, CA) 04/2018—12/2018

- Taught lectures on multivariable calculus, linear algebra, and partial differential equations.
 - Held over 90 h of OHs, gave 4 lectures, and designed review session material (see [GitHub](#)).
 - Averaged **4.5/5.0** for “Effectiveness” and **4.2/5.0** for “Amount learned from him” ($n = 109$).
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SERVICE

- Mentored three undergraduates in research projects, including a [McNair Scholar](#), and several more in the graduate school application process, including the [Graduate Pathways to STEM \(GPS\) program](#).
- As the Academic & Industry Liaison in the [MSE Graduate Student Council](#), I led seminar initiatives (e.g., C³ socials, student-nominated speakers, speaker lunches), compiled preliminary exam resources, synthesized curriculum suggestions, and organized industry events (Exponent info session).
- Reviewed two papers for the ASEE NSF Grantees Poster Session.