
EDUCATION

University of California, Berkeley (08/2019–12/2023, anticipated)

Ph.D. | [Materials Science and Engineering](#) (MSE), co-advised by [Mark Asta](#) and [Tim Frolov](#) | 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

- 2020 [National Science Foundation Graduate Research Fellowship Program](#) (NSF GRFP).
 - 2022 UC Berkeley (UCB) [Outstanding Graduate Student Instructor Award](#).
 - Certificates in [Teaching and Learning in Higher Ed](#) (UCB) and [Inclusive STEM Teaching Project](#) (CIRTL).
 - Awarded two Curriculum Development Grants worth a total of \$1,500.
 - Experience writing digital textbooks using \LaTeX , Jupyter, Inkscape, and other tools. Examples: [QM](#), [MI](#).
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TEACHING AND MENTORING 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). *Overall effectiveness: 4.9/5.0* ($n = 17$).
- Designed an education research project with [modules](#) on data visualization and science communication in MSE 104. *First-author* manuscript accepted to the [2023 ASEE Annual Conference](#).

Research Internship Mentor for [LBNL MSD DEI](#) initiative (Berkeley, CA) Summer 2021 and 2022

- Designed an original, open-source materials informatics (MI) curriculum ('21, '22) using [Jupyter Book](#).
- Mentored 11 undergraduates in using MI techniques for data-driven discovery of high- κ dielectrics.
- *First-author* article published in *J. Chem. Educ.* and *spotlight presentation* at the [2021 MRS Fall Meeting](#).

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

- Contributed towards open-source [MI learning tools](#) using Jupyter notebooks.
- *First-author* Material Matters article published in [MRS Bulletin](#) on industry workforce development.

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

- Assisted with courses 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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ADDITIONAL SERVICE

- Member of [Universal Design for Learning \(UDL\) Working Group](#) to redesign the MSE pedagogy course. First-author abstract submitted to the [2023 NAMES conference](#).
- Mentored two 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 organized dept. seminar socials and invited speakers, compiled Preliminary Exam resources, and synthesized curriculum suggestions.
- MSE Department Coordinator for the [Respect is Part of Research Workshop](#), a peer-led sexual violence and sexual harassment ([SVSH](#)) prevention workshop required for new PhD students.
- Reviewer for the Materials Division of the [American Society for Engineering Education](#).