chenze@berkeley.edu | +1 (650) 653-1650 | https://enze-chen.github.io

## **EDUCATION**

University of California, Berkeley (08/2019–05/2024, 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

- 2023 Certificate of Teaching and Learning and GSI Teaching Effectiveness Award.
- 2022 UC Berkeley (UCB) Outstanding Graduate Student Instructor (GSI) Award.
- 2020 National Science Foundation Graduate Research Fellowship Program (NSF GRFP).
- Certificates in Evidence-based STEM Teaching and Inclusive STEM Teaching Project from 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.

#### TEACHING AND MENTORING EXPERIENCE

## MSE Education Researcher and Content Developer

01/2023—present

- Designed an education research project with modules on data visualization and science communication in MSE 104. First-author paper presented at the 2023 ASEE Annual Conference.
- Member of Universal Design for Learning (UDL) Working Group to redesign the MSE 45 course with Mark Asta. First-author presentation at the 2023 NAMES conference.
- Work on Computing and AI has been featured in a *first-author* Material Matters article in *MRS Bulletin*, a *JOM* interview, and a presentation at MS&T 2023.

# 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 ( $\sim 160$  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 ( $\sim 90$  students). Overall effectiveness: **4.9/5.0** (n = 17).

## 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- $\kappa$  dielectrics.
- First-author article published in J. Chem. Educ. and spotlight presentation at the 2021 MRS Fall Meeting.

## **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).

## ADDITIONAL SERVICE

- 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.