









enze.chen1@gmail.com | (314) 562-1965 | https://enze-chen.github.io

EDUCATION

University of California, Berkeley (2019–2023, anticipated)

Ph.D. | 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.
- Scientific computing and machine learning (ML) expertise for physical science problems.
- 2020 National Science Foundation Graduate Research Fellowship.

TEACHING EXPERIENCE

Teaching Assistant for MSE 45: Properties of Materials (Berkeley, CA)

08/2021—12/2021

• Designed lab lectures and taught labs for ~ 50 students about introductory MSE concepts.

Summer internship mentor for MSD DEI initiative (Berkeley, CA)

06/2021-07/2021

- Designed an 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.
- Oral presentation at the 2021 MRS Fall Meeting (BI01 symposium).

Section Leader for Stanford University's Code in Place (online)

04/2021 - 05/2021

- Volunteer section leader for a 5-week introductory programming course in Python.
- Taught interactive weekly sections for 50 min each week for 10 students from all over the world.

Instructional Designer (ID) at Citrine Informatics (Redwood City, CA)

01/2019 - 07/2019

- Contributed towards open-source MI learning tools using Jupyter notebooks.
- 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.

Curriculum Development Assistant in MSE Department (Stanford, CA)

06/2017-01/2018

- Designed a 100-page coursereader for Prof. Aaron Lindenberg's quantum mechanics class. (GitHub)
- Applied for and won a \$1,200 Curriculum Development Grant from Stanford VPTL.
- Undergraduate voice for MATSCI Advisory Board to advocate improvements to MSE department.

RESEARCH EXPERIENCE

Ph.D. Student advised by Prof. Mark Asta (UC Berkeley, CA)

08/2019—present

- Use atomistic simulations (DFT and MD) and materials informatics to study interfaces in metallic alloys.
- Summer 2020 MaCI Intern at Lawrence Livermore National Laboratory working with Timofey Frolov. SLAM competition finalist and oral presentation at TMS 2021. Manuscript in preparation.
- Performed semi-grand canonical structure search for twin boundary phases in Ti as part of a collaboration. Co-authored manuscript under review (arXiv preprint).
- As the Academic & Industry Liaison in the MSE Graduate Student Council, I led seminar initiatives, compiled preliminary exam resources, synthesized curriculum suggestions, and organized industry events.