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## 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

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## 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.
  - Experienced in Python and MATLAB. Working knowledge of C++ and Linux systems/tools.
  - 2020 [National Science Foundation Graduate Research Fellowship](#).
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## TEACHING EXPERIENCE

**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* [Citrination learning tools](#) using Markdown and Jupyter notebooks.
- Designed 2 days of academic 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 for “Effectiveness” and 4.2/5 for “Amount learned from him” out of 109 reviews.

**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.
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## 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.