
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

- 2020 [National Science Foundation Graduate Research Fellowship](#).
 - Scientific computing and machine learning (ML) expertise for physical science problems.
 - Experienced in Python and MATLAB. Working knowledge of C++ and Linux systems/tools.
 - Pedagogical content knowledge in physical science domains with experience in instructional design.
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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.

R&D Intern at [Sandia National Laboratories](#) (Albuquerque, NM) 06/2018—09/2018

- Mentored by [John Mitchell](#) and [Jay Lofstead](#) in the [Center for Computing Research](#).
- Multiscale modeling studies of [kinetic Monte Carlo](#) (KMC) simulations for [additive manufacturing](#).
- Profiled the [Stitch I/O](#) system integrated with [SPPARKS](#) on high-performance computing clusters.
- Co-authored publication: Lofstead, Jay et al. in *Proceedings of the 34th IEEE IPDPS*, 2020.

UG Research Assistant advised by Prof. [Evan Reed](#) (Stanford, CA) 06/2016—06/2018

- Demonstrated transferability of KMC models for predicting reactions in different chemical systems.
 - *Oral presentation* at the 2017 MRS Fall Meeting ([TC04.08.08](#)).
 - *First-author* publication: Chen, Enze et al. *The Journal of Physical Chemistry A*, 123, 2019.
 - Co-authored book chapter in *Computational Approaches for Chemistry Under Extreme Conditions*.
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TEACHING EXPERIENCE

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 materials (see [GitHub](#)).
- Averaged 4.5/5 for “Effectiveness” and 4.2/5 for “Amount learned from him” out of 109 reviews.