

Megan Le

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EDUCATION

Ph.D. in Computer Science Massachusetts Institute of Technology <u>Advisors:</u> Heng Li and Bonnie Berger	2023 – present
M.S. in Computational Science, Engineering, and Mathematics University of Texas at Austin <u>Advisor:</u> Vagheesh Narasimhan	2021 – 2023
B.S. in Computer Science, High Honors University of Texas at Austin	2018 – 2022
B.S. in Mathematics, High Honors University of Texas at Austin	2018 – 2022
B.A. in English Literature, Highest Honors University of Texas at Austin	2018 – 2022

RESEARCH AND WORK EXPERIENCE

Bonnie Berger Lab and Heng Li Lab , PhD Student Massachusetts Institute of Technology, Harvard Medical School, and Dana-Farber Cancer Institute <u>Advisors:</u> Bonnie Berger and Heng Li	Jan 2024 – present
Vagheesh Narasimhan Lab , Research Assistant University of Texas at Austin <u>Advisors:</u> Vagheesh Narasimhan and Arbel Harpak	Sep 2020 – Jun 2023
Computational Research in Ice and Ocean Systems Group , Research Capstone University of Texas at Austin <u>Advisors:</u> David Halpern (Scripps Institution of Oceanography) and Patrick Heimbach	Jan 2021 – May 2022
UT COVID-19 Modeling Consortium , Research Assistant University of Texas at Austin <u>Advisor:</u> Spencer Fox	Sep 2020 – Dec 2020
The Federal Reserve Board , Software Development Intern Data Modeling Systems Team	Jun 2020 – Aug 2020
Computational Materials Stream , Research Assistant University of Texas at Austin <u>Advisor:</u> Juliana Duncan	Jan 2019 – May 2020

PREPRINTS / UNDER REVIEW

2. **Le MK**, Qin Q, Li H. Long-range somatic structural variation calling from matched tumor-normal co-assembly graphs. *bioRxiv* (2024). doi: [10.1101/2024.07.29.605160](https://doi.org/10.1101/2024.07.29.605160). *Under review*.
1. **Le MK**, Smith OS, Akbari A, Harpak A, Reich D, Narasimhan VM. 1,000 ancient genomes uncover 10,000 years of natural selection in Europe. *bioRxiv* (2022). doi: [10.1101/2022.08.24.505188](https://doi.org/10.1101/2022.08.24.505188). *Under review*.

PUBLICATIONS

1. Halpern D, Le MK, Smith TA, Heimbach P. Comparison of ADCP and ECCOV4r4 Currents in the Pacific Equatorial Undercurrent. *Journal of Atmospheric and Oceanic Technology*, 40(11), 1369-1381 (2023). doi: [10.1175/JTECH-D-23-0013.1](https://doi.org/10.1175/JTECH-D-23-0013.1)

CONFERENCE TALKS

1. "1,000 ancient genomes uncover 10,000 years of natural selection in Europe." Platform talk at the American Society of Human Genetics 2022 Annual Meeting; Los Angeles, CA, October 2022.

INVITED TALKS / SEMINARS

3. University of Illinois at Urbana-Champaign, Department of Computer Science, March 2023. "1,000 ancient genomes uncover 10,000 years of natural selection in Europe."
2. Variant Effects Seminar Series, December 2022. "1,000 ancient genomes uncover 10,000 years of natural selection in Europe."
1. UT Austin RNA & DNA Club Seminar, November 2022. "1,000 ancient genomes uncover 10,000 years of natural selection in Europe."

POSTERS

3. Long-range somatic structural variation calling from matched tumor-normal co-assembly graphs.
 - American Society of Human Genetics 2024 Annual Meeting; Denver, CO, November 2024.
 - Harvard Medical School Department of Biomedical Informatics Science Day; Boston, MA, September 2024.
2. A genome-wide scan of time-stratified ancient DNA data to uncover 10,000 years of natural selection in Europe. UT Austin Undergraduate Research Forum; Austin, TX, April 2022.
1. Modifying the Atomistic Machine-learning Package for real-time atomic simulations with DFT accuracy. Texas Advanced Computing Center Symposium for Texas Researchers; Austin, TX, September 2019.

SOFTWARE

colorSV: large-scale somatic SV caller that leverages tumor-normal co-assembly graphs 2024
github.com/mktle/colorSV C++

TEACHING EXPERIENCE

Principles of Computer Systems (CS 439), Teaching Assistant Jan 2020 – Dec 2021
University of Texas at Austin, Department of Computer Science
Instructor: Alison Norman

Computational Materials Stream, Research Mentor Jan 2020 – May 2021
University of Texas at Austin, Oden Institute for Computational Engineering and Sciences

Sanger Learning Center, Tutor Aug 2019 – Dec 2020
University of Texas at Austin
Classes: Data Structures, Probability, Discrete Math, Calculus, Introduction to Programming

Probability I (M 362K), Grader Aug 2019 – Dec 2019
University of Texas at Austin, Department of Mathematics

HONORS AND AWARDS

Dean's Honored Graduate University of Texas at Austin, College of Natural Sciences	May 2023
Graduate of Distinction in Service & Leadership University of Texas at Austin, College of Natural Sciences	May 2023
Graduate of Distinction in Research University of Texas at Austin, College of Natural Sciences	May 2022, May 2023
MIT EECS Great Educators Fellowship Massachusetts Institute of Technology, Department of Electrical Engineering and Computer Science	Feb 2023
NCWIT Collegiate Award Finalist National Center for Women & Information Technology	Dec 2021
Undergraduate Research Fellowship University of Texas at Austin, Office of the Vice President for Research	Nov 2021
James F. and Bernice M. Hinton Endowed Presidential Scholarship University of Texas at Austin	May 2021
Advanced Summer Research Fellowship University of Texas at Austin, Texas Institute for Discovery Education in Science	Apr 2021
Eva Stevenson Woods Endowed Presidential Scholarship University of Texas at Austin	May 2020
Second Year Excellence Award University of Texas at Austin, College of Natural Sciences	Mar 2020
Freshman Research Initiative Summer Research Fellowship University of Texas at Austin, Texas Institute for Discovery Education in Science	Apr 2019

SERVICE, OUTREACH, AND LEADERSHIP

Reviewer RECOMB 2025	
Outreach Massachusetts Science and Engineering Fair, Project Mentor MIT Computational and Systems Biology Seminar, Organizer MIT EECS Graduate Application Assistance Program, Mentor UT Austin ACM 4 Change, Committee Member UT Austin Coding in the Classroom, Mentor UT Austin Hour of Code Initiative, Teacher	Oct 2024 – present Sep 2024 – present Fall 2023 – present May 2021 - Dec 2022 Oct 2019 - Mar 2020 Dec 2018, 2019, 2022
Other Leadership UT Engineering Chamber Orchestra, Engineering Council Representative UT Engineering Chamber Orchestra, Recruitment Coordinator	May 2021 – May 2022 May 2020 – May 2021