

# Melinda Chang

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[melindachang.com](http://melindachang.com)

[github.com/melindachang](https://github.com/melindachang)

## RESEARCH INTERESTS

- Cultural analytics, computational humanities
- Natural language processing (NLP), software engineering
- Literary theory, critical and cultural studies

## Education

2024–Present

**B.A., Computer Science & Comparative Literary Studies**

*Northwestern University*, Evanston, IL

GPA: 3.73, Dean's List (1 quarter)

## Selected Experience

2025–Present

UNIVERSITY OF CALIFORNIA, BERKELEY

*Undergraduate Researcher*, School of Information

Advisor: Prof. Timothy Tangherlini. Apprehending narrative in the Icelandic saga with literary-theoretical and computational methods.

Berkeley, CA

2023–2024

UNIVERSITY OF CALIFORNIA, SAN DIEGO

*Student Researcher*, Programming Systems Group

Advisor: Prof. Michael Coblenz. Toward ergonomic programming languages and software processes for computational climate scientists.

La Jolla, CA

2022

UNIVERSITY OF CALIFORNIA, SAN DIEGO

*Research Assistant*, Laboratory for Computational Astrophysics

Advisor: Prof. Michael Norman. Systems programming to support analysis of dark matter halos in early universe simulations.

La Jolla, CA

2022

HACK CLUB

*Software Engineer Intern*

Building web tooling for JavaScript-based game engine.

Shelburne, VT (Remote)

## Publications

2024

Elizaveta Pertseva, *Melinda Chang*, Ulia Zaman, Michael Coblenz, “[A Theory of Scientific Programming Efficacy](#).” ICSE 2024 [International Conference on Software Engineering].

## Awards & Grants

2024	National Merit Finalist.
2023	4th Place in Computational Systems & Analysis, <i>California Science &amp; Engineering Fair</i> .
2023	1st Award in Computer Science & Systems Software, <i>Greater San Diego Science &amp; Engineering Fair</i> .

## Service

2025–Present	<i>Founder &amp; Editor-in-Chief</i> , Critical Culture Undergraduate Journal Northwestern’s premier undergraduate venue for critical writing.
2024–Present	<i>Director of Technology</i> , WildHacks Leading software development at the largest collegiate hackathon in Chicagoland.
2021–2024	<i>Outreach Volunteer</i> , San Diego Astronomy Association
2023	<i>Founder &amp; Director</i> , Hack the Wave Organized San Diego County’s biggest-ever high school hackathon.

## Selected Projects

2022–2023	<a href="#">Albio</a> . Lightweight JavaScript compiler to enable reactive web programming directly in mark-down. Outperformed Virtual DOM-based frameworks like React, Vite in key benchmarks.
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## Selected Skills

TypeScript, React, Svelte, SASS • Rust • C/C++ • Python • Java • Haskell • UNIX, Bash, Git.

## Relevant Coursework

Data Structures & Algorithms • Intro to Literary Theory • C/C++ Programming • Intro to Functional Programming • Intro to Computer Systems • Multivariable Calculus • Linear Algebra.