

Nicole Goridkov

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EDUCATION

University of California, Berkeley <i>PhD in Mechanical Engineering; GPA: 4.0/4.0</i> <i>Masters of Science in Mechanical Engineering; GPA: 4.0/4.0</i>	Berkeley, CA Aug 2021 – Present 2024
Massachusetts Institute of Technology <i>Bachelors of Science in Mechanical Engineering; GPA: 4.8/5.0</i>	Cambridge, MA 2021

PEER-REVIEWED PUBLICATIONS

- **Goridkov N**, Wang Y, and Goucher-Lambert K. (2025). “Empowering designers to create life cycle informed products: heuristics for extracting insights from LCA reports.” *Design Science*
- **Goridkov N**, Ng Z, and Goucher-Lambert K. (2025). “Data-Driven Sustainable Design Opportunities from Automated User Insights.” *ASME International Design Engineering Technical Conferences - Design Theory and Methodology Conference*
- **Goridkov N** and Goucher-Lambert, K. (2025). “Harnessing digital vs physical design for sustainable behavior strategies: A review.” *Proceedings of the Design Society*
- **Goridkov N**, Wang Y, and Goucher-Lambert K. (2024). “What’s in this LCA Report? A Case Study on Harnessing Large Language Models to Support Designers in Understanding Life Cycle Reports.” *Proceedings of CIRP Conference on Life Cycle Engineering*
- **Goridkov N**, Ye K, Wang Y, and Goucher-Lambert, K. (2023). “Challenges in Extracting Insights from Life Cycle Assessment Documents During Early Stage Design.” *Proceedings of the Design Society*
- Wang Y, **Goridkov N**, Grandi D, Cui D, Rao V, and Goucher-Lambert K. (2023). “Embedding Experiential Design Knowledge in Interactive Knowledge Graphs.” *ASME Journal of Mechanical Design*
- **Goridkov N**, Rao V, Cui D, Grandi D, Wang Y, and Goucher-Lambert K. (2022). “Capturing Designers’ Experiential Knowledge in Scalable Representation Systems: A Case Study of Knowledge Graphs for Product Teardowns.” *ASME International Design Engineering Technical Conferences - Design Theory and Methodology Conference*

PRESENTATIONS

- Enabling Knowledge Transfer from Life Cycle Assessment Documents for Sustainable Design. *ASME International Design Engineering Technical Conferences*. Boston, MA. Aug 21-23, 2023.
- Effects of Coastal Ocean Acidification on Commercially Important Organisms. *MIT SuperUROP Symposium*. Cambridge, MA. May 6, 2021.

RESEARCH EXPERIENCE

UC Berkeley Co-Design Lab <i>Graduate Research Assistant</i>	Berkeley, California Aug 2021 – Present
<ul style="list-style-type: none">• Lead research on sustainable design, knowledge transfer, and early-stage design processes using a mix of qualitative, experimental, and computational methods• Collaborate with academic and industry partners (Autodesk Research, BMW Group, Amazon Science), resulting in multiple publications working with diverse teams• Mentor masters and undergraduate students on project scoping, study design, AI, prototyping, data analysis, and paper writing	
MIT Sea Grant: Effects of Ocean Acidification on Mollusks <i>Undergraduate Research Assistant</i>	Cambridge, MA Aug 2020 – May 2021
<ul style="list-style-type: none">• Statistically analyzed existing literature on mollusks and ocean acidification using meta-analysis techniques• Explored relationship between increasing carbon dioxide emissions and marine organism development to predict future effects on organisms with large roles in New England economy• Compiled data to support argument for published paper	

MIT Medical Device Design: Ward-level Oxygen for Emerging Markets*Senior Capstone Project*

Cambridge, MA

Aug 2020 – Dec 2020

- Analyzed and optimized oxygen generation system that uses off the shelf components
- Collaborated with international partner to understand context and market surrounding central issue
- Prototyped bench top system with ability to produce medical-grade oxygen to test and confirm analytical results

MIT Teaching Systems Lab: Designing Tools for Inclusivity in Classrooms*Undergraduate Research Assistant*

Cambridge, MA

June 2018 – Aug 2018

- Designed, prototyped, and tested games and playful tools for Teacher Candidates
- Collaborated with other undergraduates and researchers to develop content and game mechanics for an enriching, enjoyable, and didactic teacher learning experience

INDUSTRY EXPERIENCE**IBM Research***User Experiences Intern*

Remote

June 2021 – Aug 2021

- Collaborated with U.S. based social justice organizations to help effectively use data to drive their missions
- Developed interview protocol and framework for early-stage data hub and accelerator project
- Researched metrics for measuring social impact of tech on marginalized communities

Microsoft*Program Manager Intern*

Remote

June 2020 – Aug 2020

- Led a 200 person user study on an early-stage incubation project for Microsoft AI team
- Recruited and conducted user interviews to gather in-depth customer insights
- Analyzed data gathered from surveys, analytics, and interviews to craft business recommendation on future of the product

Tektronix*Mechanical Engineering Intern*

Beaverton, OR

June 2019 – Aug 2019

- Designed and manufactured oscilloscope probe tip for upcoming DDR5 memory application, within flex circuit and coaxial cable form factors
- Analyzed models in Creo Pro Inventor to optimize for reasonable bandwidth and flexibility
- Drafted and submitted Invention Disclosure form

AWARDS**2025** — UC Berkeley Diversity & Community Fellow**2020, 2022, 2023, 2024, 2025** — Hispanic Scholarship Fund Scholar**2024** — Hearts to Humanity Eternal (H2H8) Fellow**2023** — NSF Graduate Research Fellow**2021** — UC Berkeley Chancellor's Fellow**2021** — GEM Fellow**2021** — Undergraduate Research and Innovation Scholar (MIT SuperUROP)**2021** — Pi Tau Sigma Mechanical Engineering Honor Society

TEACHING ACTIVITIES**Human-Centered Design Methods**

UC Berkeley

*Course Development & Graduate Student Instructor***Designing Digital Sustainability**

UC Berkeley

Graduate Student Instructor

LEADERSHIP ACTIVITIES

Berkeley Engineering Design Scholars Program	<i>Program Manager, Mentor</i>	<i>UC Berkeley</i>
Mechanical Engineering Graduate Student Council (MEGSCo)	<i>President</i>	<i>UC Berkeley</i>
Latinx Association of Graduate Students in Engineering and Science (LAGSES)	<i>Vice President, Social Chair, Mentor</i>	<i>UC Berkeley</i>
Graduate Women in Engineering (GWE)	<i>Mentor</i>	<i>UC Berkeley</i>
Letters to a Pre-Scientist (LPS) Program	<i>Mentor, Pen Pal</i>	<i>UC Berkeley</i>
Society of Professional Hispanic Engineers	<i>Member</i>	<i>MIT</i>
Liceo Scientifico A. Calini, Brescia, Italy	<i>Physics Instructor with MIT Global Teaching Program</i>	<i>MIT</i>
LUCHA	<i>Head of LatinX Graduation Ceremony Committee, Executive Board Secretary</i>	<i>MIT</i>
Educational Studies Program	<i>Course Instructor: The Science of Food</i>	<i>MIT</i>

SERVICE

- 2024:** ACM AutoUI Conference Sustainability Chair
2022, 2023: UC Berkeley Mechanical Engineering Faculty Search, Student Committee

MENTORSHIP

- 2025:** Allison Yuh (Undergraduate Mechanical Engineering)
2025: Lilah Durney (Undergraduate Computer Science / Jacobs Design Scholar)
2024: Derrick Ng (Undergraduate Computer Science / Jacobs Design Scholar)
2024: Sheila Mercado (Undergraduate Conservation and Resource Studies / Jacobs Design Scholar)
2023: Asbah Wasim (Undergraduate Cognitive Science / Jacobs x BMW Group Collaboration)
2023: Amber Louie (Undergraduate Architecture / Jacobs x BMW Group Collaboration)
2023: Tomas Garcia (Masters of Design / Jacobs x BMW Group Collaboration)
2023: Aaron Li (Masters of Design / Jacobs x BMW Group Collaboration)
2022: Kelly Ye (Undergraduate Computer Science / Jacobs Design Scholar)