

Stanford

Tess Hegarty

Ph.D. Student in Civil and Environmental Engineering, admitted Spring 2018

Bio

BIO

Tess Hegarty is currently a PhD candidate in the Civil and Environmental Engineering Department, and she's passionate about building decarbonization as a part of addressing the climate crisis. Her PhD thesis research explores the intersection of probabilistic life cycle assessment (LCA) metrics and industrialized construction through ongoing collaborations between industry and academia.

Her undergraduate degree focused on structures, architecture, and design via MIT's flexible 1-ENG program, and she spent her junior year studying abroad at the University of Cambridge. Directly after graduating from MIT, she started her MS/PhD at Stanford, with fellowship support from the NSF GRFP and SGF.

While at Stanford, she co-founded a volunteer student organization called Engineering Students for Diversity, Equity, and Inclusion (ES4DEI). She's also interested in design thinking and has taken four d.school classes while at Stanford, including Designing (Ourselves) for Racial Justice, Transformative Design, Creativity in Research Scholars, and Print on Purpose. She enjoys applying her graphic design skills for Scientists Speak Up, a student organization dedicated to combatting science misinformation.

HONORS AND AWARDS

- Rising Environmental Leaders Program (RELP), Stanford Woods Institute (2019)
- Stanford Graduate Fellowship (SGF), Stanford University (2017)
- Graduate Research Fellowship Program (GRFP), National Science Foundation (NSF) (2017)

EDUCATION AND CERTIFICATIONS

- MS, Stanford University, Structural Engineering (2019)
- BS, Massachusetts Institute of Technology (MIT), Civil and Environmental Engineering (2017)

SERVICE, VOLUNTEER, AND COMMUNITY WORK

- Co-President (2020)
- Graphic Design Chair (2017 - 2020)
- Graphic Design Chair (2021)

PERSONAL INTERESTS

mind: reading, meditation, mindfulness

hand: graphic design, architecture, painting, mending clothing

heart: DEI in STEM, mental health, minimalism, family, friends

body: skiing, hiking, camping, yoga, travel

LINKS

- Lepech Research Group Site: <https://lepech.sites.stanford.edu/>
- My LinkedIn: <https://www.linkedin.com/in/tesshegarty/>

Research & Scholarship

PROJECTS

- Creating Sustainability-focused Value through Industrialized Construction: The Role of Organization-related, Process-related, or Product-related Strategies and Technology Interventions - Center for Integrated Facility Engineering (CIFE) at Stanford (2020 - present)
- CARBONHOUSE: Probabilistic Life Cycle Assessment for a New Carbon-Composite Building Material Paradigm - Precourt Institute for Energy at Stanford (2019 - present)

LAB AFFILIATIONS

- Michael Lepech, Lepech Research Group (4/1/2018)

Professional

WORK EXPERIENCE

- Environmental Health and Safety Intern - Clark Pacific (June 2020 - September 2020)
- Visiting Scholar - EPFL's Structural Xploration Lab (SXL) (June 2018 - August 2018)
- Student Researcher - Structural Biomechanics Lab at Imperial College London (June 2016 - August 2016)
- Undergraduate Researcher - MIT Structural Design Lab (June 2015 - August 2015)