EDUCATION

(2020-present) PhD Candidate, Applied Mathematics – Northwestern University

Department of Engineering Sciences and Applied Mathematics. Advisor: Madhav Mani, PhD. GPA: 3.936

Email: addi.howe@gmail.com

Website: addihowe.com

- (2021) M.S. Applied Mathematics Northwestern University
- (2018) B.A. Mathematics, teaching concentration UC Berkeley GPA: 3.832

Teaching

- (Spring, 2024) Northwestern University, Engineering Sciences and Applied Math Teaching Assistant TA for Mathematics of Life: From Physics to data-driven modeling (taught by Madhav Mani)
- (2021–2022) Northwestern University, Engineering Sciences and Applied Math Teaching Assistant TA for Engineering Analysis (Differential Equations) and Multivariable Calculus.
 - (2019) Humphreys University Adjunct Instructor Summer instructor for Math 101: College Algebra.
- (2016–2018) UC Berkeley EECS Dept Undergraduate Student Instructor Undergraduate TA and grader for Berkeley's intro computer science course, CS10.

Work Experience

(2020-present) Northwestern University, School of Professional Studies - Math Place Tutor

(2018–2020) Private Math Tutor

(2016–2018) UC Berkeley Student Learning Center – Math Tutor & Study Group Leader

AWARDS

(2022) Outstanding Teaching Assistant Award, Northwestern University, ESAM

Affiliations

(2021–present) Society for Industrial and Applied Mathematics Northwestern SIAM Student Chapter

Projects

(in progress) Neural Network-based learning of cellular differentiation landscapes

A modeling framework based in Morse-Smale Theory that uses machine learning techniques to infer a Waddington Landscape model of cellular differentiation. Manuscript in progress. Code available on GitHub.

Addison Howe Latest version: https://addihowe.com/cv/cv.pdf August 5, 2024