
Experience — Mathematics

- 2017–2019 **Teaching Assistant**, *Northwestern University*, Evanston, IL
Assisted professors of six multivariable and single-variable undergraduate calculus classes by running discussion sections and working one-on-one with students.
- 2017–2018 **Peer Tutor**, *Northwestern University*, Evanston, IL
Assisted fellow undergraduates of Northwestern University with a variety of math courses in a weekly, drop-in setting.
- Summer 2017 **Independent Research in Math**, *Northwestern University*, Evanston, IL
Developed a concept of *mathematical fragility* in birth and death stochastic processes.
 - Used Python and accompanying analytical tools to develop a preliminary model through simulation of birth and death stochastic processes.
 - Mathematically analyzed examples to verify properties of these preliminary models.
 - Abstractly developed these preliminary models using mathematical tools from probability to draw out quantities that describe the fragility of a process.

University & Education

- 2015–2019 **Mathematics**, *Northwestern University*, Evanston, IL, GPA: 3.7/4.0
Undergraduate major in Math with emphasis on advanced classes where possible.
Relevant Courses:
 - *ISP Math* — A three quarter intensive course covering multivariable calculus, ordinary differential equations, and linear algebra.
 - *Foundations of Higher Math* — A single quarter course on the standards of mathematical proof.
 - *MENU Real Analysis* — A three quarter intensive course that rigorously develops calculus, including measure theory.
 - *MENU Abstract Algebra & Abstract Algebra* — Two quarters of an intensive course devoted to the study of groups and rings, followed by a one quarter course on Galois Theory.
 - *Other Computer Science & Applied Math* — Various computer science and applied math courses covering topics including data structures, Python implementations of fundamental algorithms from machine learning, and computational neuronal modeling.
- Music Technology**, *Northwestern University*, Evanston, IL
Undergraduate minor in Music Technology, with coursework focused on synthesis and analysis of electronic music. In a degree project, co-designed and prototyped a laser harp digital music interface.
- 2011–2015 **High School Diploma**, *Pacific Ridge School*, Carlsbad, CA, GPA: 4.0/4.0

Awards

- May 2016 **Excellence in Mathematics by a First-Year Student**, *Northwestern University*, Evanston, IL
Award given to students who display strong achievement in a number of advanced mathematics courses offered at Northwestern University.
- May 2019 **Certificate of Recognition for Service as an Undergraduate Teaching Assistant**, *Northwestern University*, Evanston, IL
A certificate given to senior teaching assistants who dedicated their distinguished skills by continually serving Northwestern's math department.

Hobbies and Interests

- Radio DJ Former on-air host of *Non-Euclidean Space*, *Excitotoxicity*, and *Late Night Geometries* on WNUR 89.3 FM Evanston-Chicago, with focus on electronic music of different geometries.
- MTG Have played the trading card game *Magic: The Gathering* at a competitive level.
- Cooking In the kitchen, a devotee of *Good Eats*'s Alton Brown and publications *Serious Eats* and *Cook's Illustrated*.