

I am a PhD student at *University of Nebraska-Lincoln*. My research interest is *Probabilistic Combinatorics*. My advisor is *Xavier Pérez Giménez*.

### **Education**

University of Nebraska-Lincoln

PhD in Mathematics

University of Nebraska-Lincoln

M.S. in Mathematics

**Fairfield University** 

B.S. in Computer Science and Mathematics

Lincoln, Nebraska, USA

August 2022 - Expected 2027

Lincoln, Nebraska, USA

August 2022 - December 2023

Fairfield, Connecticut, USA

2018 - 2022

### **Honors and Awards**

National

- O Ranked 193 (out of 2975 participants) at Putnam Math Competition 2021.
- O Third Prize in Vietnam Mathematical Olympiad 2017.

Local

- O Math Department's Outstanding Qualifying Exam (University of Nebraska-Lincoln, 2024).
- O Graduated summa cum laude (with highest distinction) from Fairfield University (May 2022).
- Math Department's Award for Outstanding Achievement in Mathematics (Fairfield University, March 2022).
- Received Fairfield University Research and Travel Grant (travelling to Florence, Italy for exchange study, Fall 2019).

# Research Experience

#### University of Nebraska-Lincoln

Lincoln, NE

Research Assistant

June 2024 - current

- I have been working with my advisor, Xavier, on Probabilistic Combinatorics. We are focusing on the
  existence of Hamilton cycles in random graphs.
- Relevant coursework: Discrete Math (a year-long graduate sequence on Combinatorics), Probabilistic Combinatorics, Probability Theory.

Fairfield University

Fairfield, CT

Math Honors Capstone, Combinatorics

January 2022 - April 2022

- Worked, with supervision of Dr. Zhanar Berikkyzy, on the following conjecture: for any 6-coloring of  $\mathbb{Z}_p$  (p a prime number), there exists a rainbow solution for  $x_1 + x_2 + x_3 = x_4 + x_5 + x_6$ .
- Presented the work at the Fairfield Math Research Symposium (April 2022).

### **EEG Memory Analysis Project - Fairfield University**

Fairfield, CT

Research Assistant, Machine Learning

June 2021 - January 2022

- Worked with Drs. Danushka Bandara (Computer Science) and Jessica Karanian (Psychology).
- We used Machine Learning to study EEG data taken from experiments on 20 subjects, with the goal of predicting the subjects' actions.
- I presented the work at the Fairfield University Research Symposium (April 2022).

## **Teaching Experience**

#### Instructor of Record.....

- O Spring 2024: Math 101 (College Algebra), 1 section, at University of Nebraska-Lincoln (UNL)
- O Fall 2023: Math 101 (College Algebra), 1 section, at UNL

#### Teaching Assistant.....

- O Summer 2023: Math 107 (Calculus II) recitation, 1 section, at UNL
- O Spring 2023: Math 107 (Calculus II) recitation, 2 sections, at UNL
- o Fall 2022: Math 107 (Calculus II) recitation, 2 sections, at UNL
- Spring 2022: Machine Learning, at Fairfield University
- o Fall 2021: Theory of Programming Languages, at Fairfield University

### **Outreach and Service**

#### Selected

#### Nguyen Tat Thanh High School for Gifted Students

Kon Tum, Vietnam

Olympiad Math Teacher

July 2020, July 2022

- Taught Number Theory (Diophantine equation), Combinatorics (micellaneous exercises).
- Shared stories about learning olympiad Math, pursuing careers with Math, and studying abroad.

#### **Hanoi Math Modeling Competition**

Hanoi, Vietnam

Software Developer

June-October 2021

- Led the development of the website for Hanoi Math Modeling Competition.

#### Others

- Volunteer (tech help) at Nebraska Conference for Undergraduate Women in Mathematics (NCUWM) (at UNL, in 2023, 2024).
- O Quiz Bowl moderator at UNL Math Day (in 2023, 2024).
- O Secretary and Treasurer at Pi Mu Epsilon, Fairfield University Chapter (in 2021-2022).
- O Grader at regional MathCounts competition (at Fairfield University, in 2019).

# **Conferences/Workshops Attended**

- 9th Lake Michigan Workshop on Combinatorics and Graph Theory (Western Michigan University, April 2024)
- AMS Central Sectional Meeting (Creighton University, October 2023)
- O Blockchain Mathematics and Computing (VIASM, July 2021)

## **Professional Experience**

#### VietESoft JSC

Hanoi, Vietnam

Software Engineer Intern

June 2020 - January 2021

- Worked on developments of outsourcing softwares using ASP.NET MVC.