Panagiotis Andreou

pandreou@email.unc.edu ⋄ LinkedIn ⋄ (984) 322-1094

Hanes Hall ⋄ 150 E. Cameron Ave., Chapel Hill, NC 27514, USA

EDUCATION

PhD Statistics & Operations Research   Expected: May 2026
University of North Carolina at Chapel Hill   Chapel Hill, NC

MSc Statistics & Operations Research   May 2025
University of North Carolina at Chapel Hill   Chapel Hill, NC

MSc Statistics & Operations Research   Jun 2023
National and Kapodistrian University of Athens   Athens, Greece
Thesis title: The Bootstrap Method for Discrete-Time Markov Chains and Applications   GPA: 9.33/10

BSc Mathematics   Jun 2020
National and Kapodistrian University of Athens   Athens, Greece
Specialization in Statistics & Operations Research   GPA: 9.44/10 (top 1.2%)

RESEARCH

Group Factor Models for High-Frequency Data (in preparation)
with Andrii Babii, Eric Ghysels, and Mirko Rubin

Homogeneity Fusion for Grouped Network VAR Models (in preparation)
with Vladas Pipiras & Changryong Baek

Opinion dynamics on non-sparse networks with community structure (Minor revisions in *Stochastic Systems*)
with Mariana Olvera-Cravioto

EXPERIENCE

Research Assistant
University of North Carolina at Chapel Hill

- "Machine Learning for Time Series"   May 2025 - May 2026
  PIs: Gerald Cohen, Eric Ghysels

- PROJECT ID: 5122181, "Network Time Series: From Dynamics to Coevolution"   Summer II, 2024
  PI: Vladas Pipiras

- NSF grant CMMI-2243261: "Opinion Dynamics on Complex Networks"   Spring 2024
  PI: Mariana Olvera-Cravioto

Instructor
University of North Carolina at Chapel Hill

- STOR 155 - Introduction to Data Models and Inference   Fall 2023, Summer 2024, Spring 2025

Teaching Assistant
University of North Carolina at Chapel Hill

- STOR 654 - Theoretical Statistics I (PhD)   Fall 2024
- STOR 435 - Introduction to Probability   Spring 2023
- STOR 557 - Advanced Methods in Data Analysis   Fall 2022
- STOR 155 - Introduction to Data Models and Inference   Spring 2021

- STOR 151 - Introduction to Data Analysis ... Fall 2021

Tutoring Undergraduate Students
University of North Carolina at Chapel Hill

- STOR 113: Decision Models for Business and Economics
- STOR 155: Introduction to Data Models and Inference
- STOR 215: Foundations of Decision Sciences (Discrete Math)
- STOR 435: Introduction to Probability
- STOR 445: Stochastic Modeling
- PLCY 460: Quantitative Analysis for Public Policy

TECHNICAL SKILLS

Python, R, Microsoft Office, LaTeX

AWARDS

2025 MLAX Faculty/Staff Appreciation Day (Link) ... Feb 2025

Excellence in Teaching Assistance and Instruction Award (Link) ... Dec 2022

National Prize Money Award, for top score in the Panhellenic Exams ... Nov 2016

Award from the Department of Mathematics, for entering 2nd among 250 students ... Aug 2016

TALKS

Homogeneity Fusion for Sparse Grouped Network VAR Models (Link) ... Apr 2025
Virtual Workshop for Junior Researchers in Time Series ... VTSS

Homogeneity Fusion for Sparse Grouped Network VAR Models ... Apr 2025
Graduate Student Seminar ... Chapel Hill, NC

Opinion dynamics on non-sparse networks with community structure ... Mar 2024
Graduate Student Seminar ... Chapel Hill, NC

Opinion Dynamics on Directed Inhomogeneous Networks (Link) ... Oct 2023
Seminar of Statistics and Operations Research, NKUA ... Athens, Greece

Bayesian Bootstrap for the Transition Matrix of Finite State-Space Markov Chains (Link) ... Sep 2021
Graduate Student Seminar ... Chapel Hill, NC

CONFERENCES

2025 Joint Statistical Meetings (Link) ... Aug 2025
1-hr talk ... Nashville, TN

Conference on New Developments in Probability (Link) ... Sep 2024
Centre de Recherches Mathématiques ... Montreal, Canada
Poster presentation

Graduate Student Probability Conference (Link) ... Sep 2024
University of Wisconsin-Madison ... Madison, WI
Poster presentation & 30' talk

Seminar on Stochastic Processes (Link) ... Mar 2024
Rice University ... Houston, TX
Poster presentation & lightning talk

STORFest - Celebrating 75 years of Statistics (Link)   Sep 2023
University of North Carolina at Chapel Hill   Chapel Hill, NC
Poster presentation

Southeastern Probability Conference II (Link)   Aug 2023
University of Virginia   Charlottesville, VA

Southeastern Probability Conference I (Link)   May 2023
Duke University   Durham, NC

Mathematics: foundation of the human thought (Link)   Nov 2016
Hellenic Mathematical Society   Chania, Greece

DEPARTMENTAL SERVICE

UNC Science Expo 2025 (Link)   Apr 2025
Coordination of the Monty Hall Problem activity   Chapel Hill, NC

BIOS-STOR Liaison   Fall 2024
Organizing monthly joint talks in the Biostatistics and STOR depatments   Chapel Hill, NC

UNC Science Expo 2024 (Link)   Apr 2024
Coordination of the Birthday Problem activity   Chapel Hill, NC

STOR Data Outreach Program for Students   Feb 2024
2024 Teaching Contemporary Mathematics Conference (Link)   Durham, NC
North Carolina School of Science and Mathematics

Graduate Student Seminar coordinator   Aug 2023 - Dec 2023
Coorganizing weekly seminar talks by PhD students   Chapel Hill, NC

UNC Science Expo 2023 (Link)   Apr 2023
Coordination of the Galton Board activity   Chapel Hill, NC

MINI-COURSES & WORKSHOPS

Workshop on Stein's method and Networks (Link)   Jun 2024
Oxford University

Multivariate Power Laws and Preferential Attachment Modeling (Link)   Jan 2023
by Sidney Resnick (Cornell University)   Chapel Hill, NC

A Celebration in Memory of Ross Leadbetter (Link)   Feb 2023
UNC Chapel Hill   Chapel Hill, NC

Stochastic Calculus with Poisson processes and their application to Biology (Link)   Nov 2022
by Philippe Robert (INRIA, France)   Chapel Hill, NC

COURSE PROJECTS

Mathematics of Deep Q-Learning for the graduate course *Reinforcement Learning*

Simulating the Movement of Trains and Passengers for the graduate course *Simulation Modeling*

Mean Field Analysis for PageRank for the graduate course *Probability for Networks and Algorithms*

Generative Adversarial Networks for the graduate course *Applied Statistics II*

Estimating the Transition Matrix of a Markov Chain for the graduate course *Object Oriented Data Analysis*

Bayesian Linear Regression and MCMC methods for the graduate course *Bayesian Inference*

Jackknife and Bootstrap for the undergraduate course *Nonparametric Statistics*

Time Series Analysis for Investment Data for the graduate course *Time Series*

Factor Analysis of the Greek Workforce Distribution for the undergraduate course *Multivariate Data Analysis*

LANGUAGES

Greek: Native Language
English: Fluent (C2 Michigan, IELTS: 8.5/9)
German: Intermediate Level (B2, Goethe Institut)

EXTRACURRICULAR ACTIVITIES

- Co-author in a file (Link) for *Mathematical Statistics*, 2024
- Co-translator of Prof. Loukia Meligkotsidou's book *Bayesian Inference*, 2019
- Contribution as a high school student at the writing of a mathematics book for the panhellenic exams, 2016
- School Table Tennis Championship, 2012, Gold Medal