

EDUCATION

Georgia Institute of Technology (Georgia Tech)

Atlanta, GA

PhD student in Computational Science and Engineering (CSE)

2023 – Present

- **Research focus:** Model reduction for Bayesian inference, advised by Prof. Elizabeth Qian

California Institute of Technology (Caltech)

Pasadena, CA

BS Applied and Computational Mathematics (ACM)

2019 – 2023

RESEARCH EXPERIENCE

Caltech Summer Undergraduate Research Fellow (SURF)

Summer 2022

Working with Dr. Elizabeth Qian on Model Reduction for Bayesian Inference

Caltech

- Implemented balanced truncation reduced models for Bayesian inference problems
- Developed a reduced model method for the Ensemble Kalman Inversion approach to solving inverse problems

Network Science Research

Winter 2022 – Present

Working with Professor Konstantin Zuev on network-based curriculum analysis

Caltech

- Developed methods to identify structurally important courses in curricula
- Developed tools to help students navigate curricula and obtain a deeper understanding of their area of study
- Proposed ways to improve the curriculum and the teaching/learning experience based on our results

Hellas Direct – Strategic Intelligence Unit

Summer 2020

Development of Data Analytics Models

Athens, Greece

- Developed a complete, end-to-end analytics project researching the origin of customers through browser cookies

TEACHING EXPERIENCE

CS 12 (Intro to Network Science) Instructor (@Caltech)

Fall 2022, Spring 2023

Developed my own course as part of CS 12: Student-Taught Topics in Computing

- The course is an introduction to the fundamental computational and mathematical concepts of Network Science
- Created original lectures and coding assignments to emphasize applications of Network Science

ACM/IDS 104 (Applied Linear Algebra) Head Teaching Assistant (@Caltech)

Fall 2021, Fall 2022

Class size ~ 150 undergraduate & graduate students

- Developed MATLAB livescripts for coding problems to help students understand and implement algorithms
- In charge of leading official exam review sessions, overseeing grading for the course, and holding weekly office hours

ACM 11 (Intro to Computational Science) Teaching Assistant (@Caltech)

Spring 2022, Spring 2023

Class size ~ 50 undergraduate students (mostly freshmen & sophomores)

- Attended lectures to help students with in-class coding exercises
- Led recitations, held weekly office hours and was responsible for grading assignments

PUBLICATIONS

“Course-Prerequisite Networks for Analyzing and Understanding Academic Curricula” | *with Zuev, K.* (2023)

- Available online at: <https://doi.org/10.1007/s41109-023-00543-w#>

TALKS

Faster solution of linear Bayesian smoothing problems using model reduction for ensemble Kalman inversion

- At the 18th Copper Mountain conference on iterative methods

AWARDS

George W. and Bernice E. Green Memorial Prize (2023) | *Awarded by Caltech*

- Institute-wide award for original research

Thomas A. Tisch Prize for Teaching (2023) | *Awarded by the Caltech Computing + Mathematical Sciences department*

- Departmental award for outstanding teaching and course development in computing and mathematical sciences

Fredrick J. Zeigler Memorial Award (2022) | *Awarded by the Caltech Computing + Mathematical Sciences department*

- Departmental award for excellence in scholarship

OTHER WORK EXPERIENCE

Cyprus National Guard

July 2018 – September 2019

Completed 14-month mandatory army service

Nicosia, Cyprus

- Enhanced team-building and team-working skills
- Learned to adapt to harsh environments and think clearly and critically in challenging situations
- Improved ability to take responsibilities and hold myself accountable

ACTIVITIES & PROJECTS

Basketball | *Caltech Basketball, Cyprus National Team, Cyprus U-18 National Team, Cyprus Division I*

Team Chemistry through Networks | *Sports Analytics Project*

- Developed a novel approach to model team chemistry in sports & make critical inferences

Turtle Run | *Game Development & Software Design Team Project*

- Implemented a fully working physics engine and used it to design and code a 2-D platform game

Beaver Maps | *Data Structures & Algorithms Project*

- Built a “mini Google maps” that finds nearby places and computes the shortest route using Dijkstra’s Algorithm

Amateur Radio | *Member of Cyprus Amateur Radio Society (CARS)*

- Holder of a full Amateur Radio Licence since the age of 13 (youngest ever to obtain one in Cyprus)