

DOMINIC ARCONA

Manhattan Beach, CA
<https://dominicarcona.github.io>

EDUCATION

University of Southern California, Los Angeles, CA.

Aug 2021 - Present

PhD Candidate, Applied Mathematics; M.S., Statistics.

GPA: 3.81/4.00

- Dissertation: Representation theory and cycle statistics for random walks on the symmetric group.
- Relevant Coursework: Statistical Foundations of Machine Learning, Time Series Analysis.

Dartmouth College, Hanover, NH.

Jun 2019

B.A., Mathematics and Chemistry Double Major, Engineering Sciences Minor.

GPA: 3.75/4.00

RELEVANT EXPERIENCE

University of Southern California, Los Angeles, CA.

Aug 2021 - Present

Graduate Teaching Assistant

- Communicate mathematical concepts clearly in twice-weekly discussion sections and office hours for undergraduate courses in calculus, probability, statistics, and linear algebra.
- Collaborate with course instructors to coordinate material covered, grade assignments and exams, and maintain consistent instructional standards across sections.
- Recognized by the USC Math Department for outstanding teaching with Dennis Ray Estes prize.

Voyatek, Remote.

Apr 2020 - May 2024

Analytics Consultant II

- Generated \$1M monthly in voluntary tax remittance for state DOR client through quarterly mail correspondence campaigns. Team received a company-wide Outcome Award for this achievement.
- Created proprietary data source of 'Remote Seller' leads using CRISP-DM and web scraping techniques.
- Applied classification and regression models to large datasets in Python to effectively prioritize leads.
- Developed client-friendly dashboard highlighting key metrics for actionable adjustments to the solution.

AQN Strategies, McLean, VA.

Jul 2019 - Mar 2020

Consultant

- Advised a national bank on pricing and fraud risk management strategies for SME loan product including A/B testing strategy for evaluation within 90 days of product launch.
- Communicated work status effectively to team members and clients.

Edgeworth Economics, Washington, D.C.

Summer 2016, Fall 2017

Economic Consultant Intern

- Performed analyses on large data sets using SAS, Stata, and Excel.
- Collaborated with consultants, partners, and CEO on multiple case teams daily.

LEADERSHIP & SERVICE

Graduate Student Combinatorics Conference (GSCC), Los Angeles, CA.

Mar 2025

Organizer

- Organized and coordinated multi-day academic conference with 80+ attendees at USC.
- Managed scheduling, speaker invitations, and logistics for researchers across institutions.
- Secured grant funding from a variety of sources to support attendees traveling to Los Angeles.

Math Graduate Student Association, Los Angeles, CA.

Aug 2023 - Present

Ski Chairman

- Plan and facilitate ski outings for Math grad students and friends each winter.
- Communicate with IKON liaison to secure perks and discounts for pass holders.

HONORS & AWARDS

Dennis Ray Estes Teaching Award: Recognized by the USC Math Department for outstanding teaching (2025).

Voyatek Outcome Award: 'Remote Seller' solution for large state DOR client received company-wide recognition (2024).

American Chemical Society Scholar: Selected for 4-year undergraduate scholarship for minority students studying Chemistry.

E. E. Just Scholar: Dartmouth scholars' program for minority students in STEM.

Hispanic Scholarship Fund Scholarship: 2015-16 and 2017-18 recipient.

SKILLS & INTERESTS

General Skills: Statistical analysis, data visualization, workflow management, technical communication, business development.

Programming Experience: Python (Torch, Pandas, Numpy), R, SQL, MATLAB, Javascript, Stata, C, SAS, Excel VBA.

Other Software/Tools: Marklogic, NiFi, SQL and NoSQL Databases, AWS, Git, MS Azure, VSCode, Jupyter, Conda.