

Nicholas Cassol-Pawson

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EDUCATION

University of California, Los Angeles (UCLA)

Los Angeles, CA

B.A. in Business Economics and B.S. in Statistics & Data Science

September 2021 – June 2025

Cumulative GPA: 3.98/4.00 (*magna cum laude*; Dean's Honor List)

Selected Courses: Regression Analysis; Statistical Models; Data Mining; Game Theory; Market Design; Multivariate Calculus; Econometric Methods; Economic Networks; Advanced Linear Algebra; Optimization; Monte Carlo Simulation; International Trade; Money and Banking; Advanced Writing for Business and Policy

EXPERIENCE

UCLA Department of Epidemiology

Los Angeles, CA

Undergraduate Research Assistant

June 2023 – April 2025

- Maintained and optimized disease diffusion simulation pipeline (R/Python), cutting runtime by 87%
- 4th author: "Infectious Disease Control as Network Interventions", *Discover Soc Sci and Health* (May 2025)

UCLA Department of Economics

Los Angeles, CA

Reader

January 2025 – April 2025

- Graded 80 students' assignments and final exams for the undergraduate behavioral economics class

Military Health Econ. and Policy Research Lab (Uniformed Services University [DoD])

Bethesda, MD

Research Assistant (Department of Defense: Pathways Internship Program)

July 2024 – September 2024

- Conducted 5 literature reviews of 75+ scientific papers to inform studies on telemedicine, surgical mortality
- Aligned variables from 12 years of annual panel surveys; identified indicators of various medical conditions

SELECTED COURSE PROJECTS

Predicting Wins Above Replacement (WAR) in Baseball Pitchers — Capstone Project

June 2025

- Explored patterns in missing data as part of team's EDA and wrote up the full EDA in team's report
- Predicted current-season WAR with a linear model (R^2 : 97%) and explained results in report to client

Missing Data in Machine Learning — Classification

December 2024

- Imputed missing data, using random forest-based and mice algorithms; fit QDA classifier to it
- Presented team's classification methods to audience of peers and prepared a report detailing methodology

Free Riding in a Military Alliance — Game Theory

May 2024

- Created a game theoretic model of free riding, with a payoff function motivated by real-world behavior
- Presented this mathematical model to a panel of financial industry professionals, followed by Q&A

Surface Temperature Forecasting — Time Series Analysis

May 2024

- Forecasted dynamics of NOAA and NASA surface temperature data with ARIMA time-series models in R
- With a VAR model, found evidence of rising global surface temperature raising sea surface temperature

EXTRACURRICULAR

UCLA AI Robotics Ethics Society (AIRES)

Los Angeles, CA

Member

January 2025 – June 2025

- Presented findings from a multi-agent real estate market simulation to a lay audience

BruinLife, UCLA lifestyle magazine and yearbook

Los Angeles, CA

Copy Editor

October 2021 – June 2025

- Edited and fact checked article submissions; 100+ published
- Recognized in 2022 and 2025 for reliability, accountability, and outstanding commitment to department

BruinRunners, UCLA running club

Los Angeles, CA

Vice President

June 2023 – June 2024

- Collaborated with both club presidents to plan, promote, and lead practices, races, and 3 travel events

SKILLS

Technical: R, Python 3 (pandas, NumPy, matplotlib), LaTeX, SQL, Redis, C++, Microsoft Office, Apple Suite

Foreign Languages: Portuguese (proficient); Spanish (elementary); German (elementary)