

Agustin Esteva

☎ +1 (210) 906-6466 | @ aesteva@uchicago.edu | in LinkedIn | GitHub | 📍 Chicago, IL 60615

Education

University of Chicago

Chicago, IL

BS in Mathematics, BA in Economics | GPA: 3.88/4.00

Sep 2023 – May 2027

Relevant Coursework: Honors Analysis in \mathbb{R}^n | Markov Chains/Martingales/Brownian Motion | Econometrics | Intro to Computer Science

University Advanced Scholars: Selective scholarship for a five-year accelerated track to a Master's degree at UChicago

Experience

UChicago Math Research Experience for Undergraduates

Chicago, IL

Pure Mathematics Research

Jun 2024 – Present

- Studied probability, real and complex analysis, combinatorics, algebra, financial mathematics, and stochastic calculus under UChicago professors and graduate students
- Researched and gave talks on Schramm-Loewner Evolutions and Gaussian Free Fields under the guidance of Professor Stephen Yearwood, with special emphasis on the universality properties of these random curves
- Published a 25-page expository paper titled "Measure Theory, Stochastic Calculus, and the Black-Scholes-Merton Model" on the measure theoretic derivation of the Black-Scholes formula using stochastic calculus and Girsanov's theorem

Research Assistant in Political Economics

Chicago, IL

Research Assistant in Political Economics

Jun 2025 – Present

- Worked under Nobel-laureate [Dr. James Robinson](#) to study the effects of policy on Rwanda's 'miracle economy' by analyzing satellite and governmental data using R, Stata, and machine learning
- Researched how social connectedness relates to productivity of government programs through advanced statistical analysis
- Attended daily workshops on methods in the social sciences such as spatial data analysis, ethical research practices, and applied econometrics

Speer Mathnasium

San Antonio, TX

Math Instructor

Jun 2022 – May 2023

- Evaluated and graded over 100 students' work, assignments, and performance while simultaneously providing instruction
- Balanced multiple students at once to give personalized instruction on subjects ranging from algebra to advanced calculus

Joint Science Technology Institute

Chicago, IL

Materials Science Researcher

Summer 2022

- Data analyst for Los Alamos National Laboratories, the Defense Threat Reduction Agency, and the University of New Mexico
- Studied materials science applications in nuclear engineering by analyzing data of Helium bubbling in Palladium samples using machine learning programs created with Python
- Presented findings to researchers on the application of machine learning on data analysis for nuclear fusion research

Activities & Leadership

Rocketry Project

San Antonio, TX

Project Manager

Aug 2019 – Jun 2023

- Led the design and fabrication of a vehicle used to take a scientific payload 50,000 feet after approval and review of a mathematical flight profile presented to NASA flight engineers
- Built all parts of the 300-lbs vehicle using in-house industrial machines after designing them on AutoCAD
- Launched in June 2023 at White Sands Missile Testing Range (New Mexico) with an apogee of 23,000 feet

University of Chicago Mathematics Department

Chicago, IL

Grader

Aug 2024 – Jun 2025

- Responsible for grading and providing feedback on theoretical proofs for calculus problems for the UChicago Mathematics Department
- Graded 60+ students' work every week, and provided instructors with useful feedback on the difficulty of the course

Awards & Achievements

Dean's List: Awarded for academic excellence at the University of Chicago

University Advanced Scholar: Half-ride scholarship for selective accelerated coursework track

Hispanic Scholarship Fund Scholar: Recognized for academic achievement and leadership potential

Interests

Bouldering, Mathematics, Cello, Tennis, Cinema, Spikeball

Skills

Technical: Stochastic Calculus, Python, Excel, AutoCAD, LaTeX, R, Stata, Machine Learning

Industrial: Mill, Lathe, Drill, and other industrial machines

Languages: English (Native), Spanish (Native)