

Eric Desoiza

ericdesoiza@uchicago.edu | (646) 565 - 7623 | GitHub @edesoiza | linkedin.com/in/eric-desoiza

EDUCATION

University of Chicago

M.S. in Computer Science

Chicago, IL

Expected, June 2025

Relevant Coursework: Time Series Analysis & Stochastic Processes, Honors Theory of Algorithms, GPU Programming

University of Chicago

B.A. in Statistics

Chicago, IL

Expected, June 2025

Relevant Coursework: Multivariate Statistical Analysis; Markov Chains, Martingales, Brownian Motion; Bayesian Inference

Awards: 2023 IDDEAS Scholar @ Kellogg/Booth, Financial Markets Program Member, John W. Rogers Scholar for Finance

EXPERIENCE

Google

Software Engineering Intern

Sunnyvale, CA

June 2024 – August 2024

- Machine Learning & Cloud AI team researching computational and statistical techniques to model performance characteristics
- Applied Weight Least Squares model to capture application-level throughput degradation through increased machine utilization
- Built a data pipeline that parallelized modeling for millions of Google Cloud machine job samples to accelerate insights
- Successfully identified chipset-level trends that can act as generalized baseline models for future new processing clusters

Blackthorne Capital Management LLC

Quantitative Research Intern

Chicago, IL

November 2023 – March 2024

- Analyzed commodity price data with team of colleagues and explored alternative data to identify profitable trading strategies
- Identified autoregressive trends in Economic Policy Uncertainty data and presented before Heads of Research and Investment

John List Voltage Research Program – UChicago Economics Department

Advanced Research Assistant

Chicago, IL

February 2023 – June 2023

- Collected and cleaned relational grant application data to examine the value of knowledge production in research
- Uncovered anomalies in demographic data (Gender, Nationality, Entity Type) that could affect the success of a grant applicant

Offit Capital Advisors – Wealth Management

Data Analytics Intern

New York City, NY

June 2022 – August 2022

- Insourced Solovis services into Azure Functions with C# to improve database access and future-proof analytics processes
- Presented visualized asset data using R (Tidyquant, Tidyverse) to CFO to identify investment vehicle correlation clustering
- Created a CLI program to streamline invoice estimations for accounts to strengthen transparency between client and company

PROJECTS

Atomic Force Field Property Prediction

Deep Learning GNN Project

Chicago, IL

May 2024 – June 2024

- Utilized message passing with graph neural networks to evaluate molecular-based graphs that mapped bonds and atoms
- Successfully built a model using PyTorch Geometric that predict atomic OPLS force field parameters

Industrial Organization & Ice Cream Shops

Cohort Data Preparation Project

Chicago, IL

July 2023 – May 2024

- Collected data related to the required operational costs and trends in a small business in competition with other shops
- Interpolated yearly and monthly data to inject periodic patterns and allow teaching opportunities on Spectral Analysis

NBA Player Hall of Fame Probability

Personal Data Science Project

Chicago, IL

January 2023 – May 2023

- Created a Hall of Fame Probability Model for NBA players using ML and Web Scraping Packages (Sklearn, BeautifulSoup)
- Scraped data from over 5000 NBA Players across history to compile a cleaned data set for regression and classification
- Currently using a Naïve Bayes Algorithm to classify players using 15 different features related to accolades and statistics

LEADERSHIP & ACTIVITIES

Oeconomica – UChicago's Economics Undergraduate Research Society

Research Cohort Director

Chicago, IL

October 2021 – Present

- Reorganizing the cohort leadership selection process to drive up member retention and quality of final projects
- Taught a cohort of students about Industrial Organization with time series and econometric analysis using R

SKILLS & CERTIFICATIONS

Technical Skills: Python, C, CUDA, C++, R, STATA, and SQL.