**Arkajyoti Sinha**

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Description automatically generated with low confidence sinha@uchicago.edu| [Icon

Description automatically generated](https://www.linkedin.com/in/arkajyoti-sinha-8b2b7123a/)

EDUCATION

**University of Chicago**|| Chicago, IL September 2023 – June 2026

*B.S. Computer Science, Mathematics & B.A. Economics*

* 3.87 GPA
* Extracurricular Activities: Maroon Capital, Behavioral Economics Association, Club Volleyball
* Relevant Coursework: Intro Computer Science I and II, Honors Calculus, Abstract Linear Algebra, Introduction to Mathematical Probability
* Current Coursework: Real Analysis, Economic Analysis Honors, Statistical Theory and Methods

WORK EXPERIENCE­­

**Harvard Business School**:*Student Researcher*  May 2024 - Current

* Developed a time series model to predict the probability of legislation passing in Congress with over 99% accuracy
* Investigated the financial effects of policies in Congress using changes in options pricing
* Utilized various machine learning algorithms including decision tree learning, neural networks, and ensemble algorithms

**MIT Sloan School of Management**:*Student Researcher*  May 2024 - Current

* Investigated the evolution of competitive equilibrium in the US beer market
* Accelerated the process of cleaning Nielson and Kilts datasets into a usable format
* Created panel analysis files and regressions to illustrate the progression of the market

**Bentley University:** *Student Researcher*  May 2024 - Current

* Created an econometric model to explore the spillover effects of lower HIV treatment costs in Africa
* Used 2SLS regression analysis and fixed effects modeling

**Ktbyte**:*Teaching Assistant*  August 2021 – August 2023

* Spent 2-3 hours a week helping middle and high-school students work through Python and Java problem sets
* Problem sets ranged from coding basics to USACO gold level problems

**Garcia Center, Stony Brook University**:*Student Researcher*  June 2022 – March 2023

* Selected from over 1500 applicants
* Mathematically and computationally modeled biopolymer properties to determine conditions necessary for gelation using LAMMPS software and Python scripts
* Presented findings in an oral presentation at the 2022 Materials Research Society Fall Conference

PUBLICATIONS

* [Characterizing Persistence and Disparity of Covid-19 Infection Rates with City Level Demographic and Regional Features](https://arxiv.org/abs/2211.12583)
* [The Classification of Magic SET Squares](https://doi.org/10.2478/rmm-2020-0005)

SKILLS­­

* Timeseries Forecasting, Neural Networks, Optimization, Regression Techniques
* Python, Java, R, Stata, MySQL, Jupyter, PyTorch, TensorFlow