

Sumit Goel

sumit.goel@nyu.edu | goelsumit.com | Abu Dhabi, UAE

EDUCATION

California Institute of Technology , Ph.D. in Social Science (minor in Computer Science) Research areas: Game Theory, Economics & Computation GPA: 4.0	2017–2023
Indian Statistical Institute, Delhi , M.S. in Quantitative Economics Score: 85.85% Class Rank 1	2015–2017
Delhi Technological University , B.Tech. in Computer Engineering CPI: 75.96% First Class with Distinction	2011–2015

EXPERIENCE

New York University Abu Dhabi , Postdoctoral Associate	2023–Present
<ul style="list-style-type: none">Conducted research in incentive and market design using game-theoretic models and experimentsTaught Intermediate Microeconomics twice (class size: ~20)	
Econschool , Instructor	2020–Present
<ul style="list-style-type: none">Developed econschool.in, hosting resources for undergraduate economics students (~50 daily visitors)Designed a year-long test series program subscribed by ~50 students annually since 2022	
Royal Bank of Scotland (RBS) , Software Intern	Summer 2014
<ul style="list-style-type: none">Wrote XSLT code to enhance reports generated by the MyVantage Analytics platform	

PROJECTS

COVID-19 Forecasting with Machine Learning	2020
<ul style="list-style-type: none">Developed a real-time forecasting model for daily COVID-19 deaths across all U.S. countiesRanked top 5 of 50+ Caltech teams on various metrics, such as pinball loss and run time (ML course, Caltech)Forecasts contributed to the U.S. COVID-19 Forecast Hub dataset, Scientific Data, Nature	
Competitive Network Seeding Algorithm	2019
<ul style="list-style-type: none">Designed an algorithm to select seed nodes maximizing diffusion under competing cascades on a networkRanked 1st among 40+ teams in the PandaManiac competition (Networks course, Caltech)	
Backtesting Algorithmic Trading Strategies (Bollinger Bands)	2015
<ul style="list-style-type: none">Built a Python-based backtesting framework using historical U.S. equity data (QSTK/pandas)Evaluated Bollinger Bands strategies across parameterizations using cumulative returns, Sharpe ratios, and turnover	

RESEARCH (Selected)

The Effect of Competition in Contests: A Unifying Approach (with Andrzej Baranski)	2025
<ul style="list-style-type: none">Analyzes how prize structures affect effort provision in contestsShows that winner-take-all prize structures maximize effort, though greater prize inequality need not increase effort	
TTC Domains (with Yuki Tamura)	2025
<ul style="list-style-type: none">Studies object reallocation problems where the Top Trading Cycles (TTC) mechanism plays a central roleCharacterizes preference domains where TTC remains uniquely desirable, with applications to kidney exchange	

ACHIEVEMENTS AND AWARDS

Publications: 6 economics journal articles, including Journal of Economic Theory, Games and Economic Behavior
Awards: PIMCO Fellowship in Data Science (2020), Best Paper at Winter School at Delhi School of Economics (2022)

SERVICE AND LEADERSHIP

Teaching Assistant at Caltech: 9 quarters across 6 courses, including Econometrics, Finance, Algorithmic Economics
Leadership: Captain of Caltech Cricket Team (2022), President of Caltech Badminton Club (2019–2020)

SKILLS

Programming: Python, R, C/C++, JavaScript, HTML, CSS

Coursework: Finance, Asset Pricing, Algorithms, Machine Learning, Econometrics, Probability