SUMIT GOEL

Email: sgoel@caltech.edu \leftherapp Phone: +1(626) 353-8184 \leftherapp Website: goelsumit.com

EDUCATION

California Institute of Technology, PhD Economics (with minor in CS) 2017 - 2023 (Expected)

Fields: Game theory, Mechanism Design, CS-Econ

GPA: 4.0/4.0

Indian Statistical Institute, Delhi, M.Sc. Quantitative Economics 2015 - 2017

Score: 85.85%, Rank 1

Delhi Technological University, B. Tech. in Computer Science 2011 - 2015

Score: 75.96%, 1st class with distinction

PROFESSIONAL EXPERIENCE

Researcher, Caltech Sep 2017 - Present

• "Prizes and effort in contests with private information" [PDF]

- "Stable allocations in discrete economies" (with Federico Echenique and SangMok Lee) R&R at JET [PDF]
- "Project selection with partially verifiable information" (with Wade Hann-Caruthers) WINE 2022 [PDF]
- "Optimality of the coordinate-wise median mechanism for strategyproof facility location in two dimensions" (with Wade Hann-Caruthers) SAGT 2022, Social Choice and Welfare [PDF]

Teaching Assistant, Caltech

Sep 2017 - Present

• Assisted in teaching of different courses including algorithmic economics, econometrics, finance (evals: 4.80/5)

Instructor, Econschool

Sep 2015 - Present

• Taught mathematics to undergraduate students interested in pursuing higher studies in economics (website)

Software Intern, Royal Bank of Scotland

May 2014 - June 2014

• Wrote XSLT code to introduce charts alongside data tables in excel reports while ensuring easy integration with the existing report generation process

PROJECTS

Caltech COVID-19 Machine Learning Project (2020): Developed a machine learning model to predict the spread of COVID-19 in the US (finished in top 5 out of 50 teams in class across various metrics). The predictions are part of the ensemble of predictions in The US COVID-19 Forecast Hub dataset published in Scientific Data, Nature

Seeds in a network with competing cascades (2020): Developed an algorithm to identify seeds in complex networks with the goal of maximizing cascade against competing cascades (finished first out of 40 teams in class)

Backtesting of trading algorithms (2015): Compared performance of well-known trading strategies like Bollinger Bands with other customized trading strategies by backtesting them in Python

MISCELLANEOUS

Programming languages and softwares: R, Python, C, C++, Github, Latex

Scholarships: Best paper award at Delhi School of Economics (2022); Fellowship by Caltech (2021); Graduate Fellowship in Data Science by PIMCO (2020); Master's student fellowship at ISI Delhi (2015-17)

Service: Referee for Theoretical Economics; President of Caltech's Badminton and Cricket Clubs; Member of division's DEI committee at Caltech

Personal: Indian citizen, born November 30, 1992

REFERENCES

Federico Echenique	Professor of Economics	U.C. Berkeley	fede@econ.berkeley.edu
Omer Tamuz	Professor of Economics	Caltech	omertamuz@gmail.com
Thomas R. Palfrey	Professor of Economics	Caltech	trp@hss.caltech.edu