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Education

- **California Institute of Technology** *2022- Present*
  - PhD in Biology Google Scholar Profile
- **Stanford University** *2013-2017, 2018-2020*
  - M.S. MS&E, B.A. Economics, B.S. Mathematics

Work Experience

- **Computational Biologist, Dana Farber Cancer Institute** *October 2020 - Sep 2022*
  - Developed an understanding of biomarkers used to make inferences from histopathology scans in lung cancer
  - Found novel Computer Vision algorithms that offer distributional robustness
- **Research Intern, Fujitsu Labs America** *January - September 2020*
  - Building an efficient sequencing model using MIP, MILP and QUBO formulations
  - Developed expertise in using solvers such as Gurobi and Google ORTools
  - Worked with team of scientists to deliver solutions to the client, patent pending
- **Research Assistant, Stanford** *August - December 2020*
  - Researched algorithmicmatching- Top Trading Cycles (TTC), Serial Dictatorship, Deferred Acceptance
  - Compared former with computational formulations using MIP, MILP using CVXpy and Gurobi
  - Modeled non-convex programs in Gurobi.

Projects

- **Herd and Tryage:** Model Routing between language models to improve domain expertise and efficiency by leveraging a herd of intelligent models and a router. Designed router and worked with engineer to deploy it. Received over 1000 queries in 3 months. Preprint 1 Preprint 2
- **Planted Clique Model:** Understanding the effect of network structures on success of seeding and vaccination strategies. Examining failure of degree centrality, random seeding on a dumbell graph. Proposed solution of max-cut for effective vaccination. Proposed theoretical results. Link
- **Causal Inference:** Explored positive correlation between temperature and crime to account for the effect of confounders. Offered contradictory evidence to popular literature using an agnostic regression and sensitivity analysis.
- **Meta Learning:** Built few-shot model from SNAIL, ProtoNets, MAML and Transfer Learning on an NIH dataset for detecting Malignant Tumors on CT scans.

Awards

- **Chen Graduate Innovator award 2023-2024**: This $10,000 prize helps students pursue radical ideas.
- **Chen Institute DEI award 2023-2024**
- **International Linguistics Olympiad** Represented India at the International Olympiad in Linguistics in 2012 and 2013, winning an Honorable Mention in 2012s.

Interests

- **Chief Risk Officer, Kudla Fund:** Made suggestions to purchase stocks, entrusted with the responsibility as a Chief Risk Officer (CRO) of hedge fund with AUM of $1 Million
- **Service** Performed Stand Up Comedy shows to Cancer Patients and their families waiting for treatment at Tata Memorial Cancer Hospital in Mumbai, India.