

EDUCATION

Second B.A. in Philosophy, Politics and Economics (PPE) **University of Oxford (2014 – 2016)**
Harris Manchester College Second Degree Scholar, K.C. Mahindra Scholar and Tiara Special Grant Scholar
Ashtiany Collection Prize for highest score in Microeconomics.

Five-Year Integrated Masters in Mathematics and Computing **IIT Delhi (2008 – 2013)**
Awarded C.K. Nanda Award for all round academic and extra-curricular excellence amongst the graduating class of 2013

WORK EXPERIENCE

CTO **Cambridge Innovation Labs (Cambridge)** **Aug 2023 – Current**

- AI Dialogue Moderator: LLM API-powered dialogue moderation system to facilitate group discussions in classroom settings. *Fulfilled a contract for Smart Learning, a Danish edtech company*
- Build an AI enabled learning network, including backend, a whatsapp bot, and a web platform as Entrepreneur in Residence, Digital Education Futures Initiative, Cambridge
 - Awarded an Innovate UK grant. Feature in University of Cambridge Blog: <https://www.deficambridge.org/platonia-the-first-worldwide-learning-web/>
 - In Press: <https://www.businessweekly.co.uk/posts/cambridge-entrepreneur-backed-by-innovate-uk-to-build-the-first-worldwide-learning-web>
- Chain of Interpretability (COIN): a multimodal agent for automating interpretability research:. In a team of four, this project combines the automation and agency of MAIA (Multimodal Automated Interpretability Agent <https://github.com/multimodal-interpretability/maia>) with a sparse autoencoder (SAE) for better extraction of monosemanticity from individual neurons.
 - Won the Grand Prize (£1k) at SoTA's AI interpretability Hackathon in London. <https://shorturl.at/gXUWu>

Senior Software Engineer **Wellcome Sanger Institute (Cambridge)** **Aug 2019 – Apr 2022**

- Developed a Docker Swarm Cluster Framework for hosting web services for Human Genetics Group using Terraform + Ansible + Python
- Developed a Hail Cluster Usage Report web app (Stack: Vue.js frontend, AIOHTTP/Python backend)
- Developed a command line tool “Vault” and a python software “Sandman” for researches to automate Human Genetics Informatics’s resource usage policies on Farm

CTO **Platonia** **Dec 2017 – Aug 2019**

- Built the first MVP of a native Android application which allows users to share skills one-on-one using an Express + Node.js + MongoDB backend and JSON-based RESTful APIs.
- Built a thorough unit and integration testing framework using Mocha, Chai, Chai-HTTP, and Sinon packages.
- Hired and managed a team of developers and designers to ship v2 and v3. Launched the application with an initial user base from Delhi

Product Leader (Jugnoo) **Socomo Technologies (Chandigarh, India)** **Dec 2016 – Dec 2017**

- Shipped features for Jugnoo, an on-demand mobile application used by more than 3 million consumers for on-demand rides, food delivery and grocery delivery in 38 cities in India. Grew from managing a team of five to a team of fifteen employees, including developers, designers, QA engineers and junior product managers.
- In-house meals delivery vertical: Piloted Instant Delivery (within 20 mins) model for operational profitability
 - Launched features: (1) Early Bird Discount (2) Bookmark Favourites (3) Meals Traffic Controller (4) Menu planner.
 - Doubled Orders/day (250 to 500); kept SLA above 80%; unit profits margin improved from 4% to 23%
- Piloted Star in Chandigarh: Jugnoo’s subscription feature offering free delivery and cashbacks for consumers
 - Launched with day-one hypothesis on pricing & benefits; iterated based on data & customer feedback.
 - Grew subscriber base to 65 subscribers; monthly retention 6.96%; avg. ROI Rs. 236/mo monthly subscriber.
- Launched the new verticals: (1) AskLocal: a QnA platform, and (2) Jugnoo Pros: an on-demand service provider. Grew AskLocal’s user base from scratch to 3000+ users, with a DAU/MAU of 5.68%.

RESEARCH EXPERIENCE

Approximation Algorithms in Network Design (Master's Thesis)

Developed two novel approaches to Connected Facility Location (CFL) problem through the non-trivial special case of Single-Sink Rent-or Buy (SRoB).

- *Thesis under Professor [Naveen Garg](#) received an outstanding grade*

Man and Machine: Questions of Risk, Trust and Accountability in Today's AI Technology

Accepted for publication (subject to revisions) in *Bulletin of Science, Technology and Society*

Congestion Based Financial Instruments for the Internet Economy (Economics Thesis)

We investigate the possibility of introducing congestion-based financial instruments, similar to derivatives in a stock market, that efficiently allocate risk borne out of congestion.

Redimensioning of Euclidean Spaces (Unpublished Manuscript)

We investigate the possibility of introducing congestion-based financial instruments, similar to derivatives in a stock market, that efficiently allocate risk borne out of congestion.

EXTRA-CURRICULAR ACTIVITIES

University Challenge Team, Harris Manchester College (2015-16) and Quiz Society, IIT Delhi (2010-11)

- Established the quiz team at Harris Manchester college from the ground up; organized regular try-outs and practice sessions
- Led a team of 11 to organize 30 events at IIT Delhi, including some of India's biggest quiz events (National Level Sweden-India Nobel Quiz 2010, in collaboration with Embassy of Swede, Mahaquizzer and Megawhats: held across 14 cities), 8 Inter-College events at annual cultural festival Rendezvous 2010 with 100+ teams participating in each event
- Podium finish (Top three) in 52 Quizzes at various levels during 2008-13, including seven nationally televised episodes across Season 1 and 2 of NDTV Tech Grandmasters. Led IIT Delhi to the National Semifinals

REFEREES

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