

PRATEEK GUPTA

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EDUCATION

University of Oxford

PhD, Engineering Science

Oxford, U.K

Oct '17 - Present

Dissertation Topic: Deep Learning for Mixed-Integer Linear Programming (MILP)

Advisors: M. Pawan Kumar, Andrea Lodi, Yoshua Bengio

- Awarded The Alan Turing Institute doctoral scholarship (7% acceptance rate)
- 2nd runner-up in the UK-wide Doctoral Researcher Awards, 2021
- Research interests: Machine learning for Combinatorial Optimization, agent-based models, simulations, and search algorithms. Devising novel ways to use AI for social good.

Columbia University

Master of Science, Operations Research, GPA: 3.96/4.0

New York, U.S

Feb '15

Indian Institute of Technology, Delhi

Bachelor Of Technology, Industrial Engineering, GPA: 8.69/10.0

New Delhi, India

May '13

Awards: Roll of Honor, Director's Merit Award, Color, Blazer, Significant Contribution (Sports)

SELECTED PUBLICATIONS 📖

Lookback for Learning to Branch 📖

TMLR, 2022

Prateek Gupta, Elias Khalil, Didier Chet  lat, Maxime Gasse, Yoshua Bengio, Andrea Lodi, M. Pawan Kumar

Predicting Infectiousness for Proactive Contact Tracing 📖 🌐

ICLR (Oral), 2021

Yoshua Bengio, **Prateek Gupta**, Tegan Maharaj, Nasim Rahaman, Martin Weiss, et al.

Hybrid Models for Learning to Branch 📖 🌐

NeurIPS, 2020

Prateek Gupta, Maxime Gasse, Elias B. Khalil, M. Pawan Kumar, Andrea Lodi, Yoshua Bengio

EXPERIENCE

DeepMind: Research Scientist Intern in AI for Science

July '22 - Nov' 22

Advisors: Alhussein Fawzi, Theophane Weber

London, UK

Proposed and implemented machine learning techniques for search algorithms to discover novel objects

Learning to Branch

Oct '17 - Present

Advisors: Pawan Kumar, Andrea Lodi & Yoshua Bengio

[TMLR, 2022] [NeurIPS, 2020]

Devising ways to automate heuristic learning using deep learning methods for MILP solvers

AI for Social Good

Oct '17 - Present

Advisor: Yoshua Bengio

[ICLR (Oral), 2021] [AAAI CCAI Symposium, 2022]

Designing ways to use AI to solve societally relevant problems. Some of the works include Proactive Contact Tracing 📖 , AI for Global Climate Cooperation Challenge , 🌐 , or a market-based approach to discover true carbon price.

University of Oxford and CambridgeSpark 🌐

Oxford/London, U.K

Teaching Assistant / Content Creator

April '21 - Present

Designed/tutored data science courses, tutorials, and hackathons for professionals and students.

MISCELLANEOUS

Languages

Python, Jax, PyTorch, C, Tensorflow, Git, D3, Bash, SQL

Online Handles

🌐 [pg2455](#) 📄 [pg2455](#) 📄 [link2prateek](#) 🐦 [pguptacs](#) 📖 [fvn0COgAAAAJ](#)

Team Competitions

Cornell Tech Hackathon (Winner), Table Tennis (Silver), Rowing (Blade)

HKBU Entrepreneurship Pitching Competition, Hong Kong (Winner)