

VISHWAJEET AGRAWAL

EDUCATION

Indian Institute of Technology (IIT), Delhi B.Tech in Computer Science (with specialization in Data analytics and AI)	2017 - 2021 GPA: 9.83/10.0
MITx Micromasters in Data, Economics, and Development Policy	May 2022 - Nov 2022 in progress
Indian Statistical Institute (ISI), Delhi Masters in Quantitative Economics	Aug 2022 - Nov 2022 dropped

RELEVANT COURSES

Calculus, Linear Algebra, Probability & Stochastic Processes, Machine Learning, Principles of AI, Optimization Methods, Theory of Computing, Computer Vision, Planning & Estimation for Autonomous Systems, Logic for CS, Database and Management Systems., Computational Neuroscience, Microeconomics, Game Theory, Data Analysis for Social Scientists, Development Policy.

PUBLICATIONS

Vishwajeet Agrawal, Rahul Jain, Parag Singla, Rohan Paul. Learning Robot Manipulation Programs: A Neuro-symbolic Approach. Appeared in *Robotics Science and Systems (RSS) 2021, Workshop on Declarative and Neurosymbolic Representations in Robot Learning and Control*.

Vishwajeet Agrawal, Pradeep Shenoy. Tracking what matters: A decision-variable account of human behavior in bandit tasks. Proceedings paper at *CogSci2021*.

Shourya Aggarwal, Divyanshu Mandowara, **Vishwajeet Agrawal**, Dinesh Khandelwal, Parag Singla and Dinesh Garg. Explanations for CommonSenseQA: New Dataset and Models. *ACL-IJCNLP 2021*.

Muqsit Nawaz, Aditya Gulati, Kunlong Liu, **Vishwajeet Agrawal**, Prabhanjan Ananth, Trinabh Gupta. Accelerating 2PC-based ML with Limited Trusted Hardware. arxiv: 2009.05566.

ACADEMIC ACHIEVEMENTS

Graduated in CSE with a **Department Rank 4** out of approx. 100 students.

AIR 5 in **JEE Mains 2017**, given by approx. 1.2 million candidates.

AIR 1 in **ISI MSQE 2022**, entrance for the topmost economics masters program in India.

Selected to represent India in **APhO** (Asian physics Olympiad) 2017.

Qualified for, and attended, **IPhO** (International Physics Olympiad) camp 2017.

Qualified for, and attended, **IAAO** (International Astronomy and Astrophysics Olympiad) camp 2016.

Qualified **RMO** (Regional Mathematical Olympiad), precursor to **IMO**.

Awarded **NTSE** and **KVPY** scholarship - most prestigious central government scholarship for grade 10 & 11 students.

INDUSTRY EXPERIENCE

AI based Computational Photography
Mobile Communications, Samsung Korea

Dr. Woojhon Choi
Sep '21 - Feb '22

- Build AI based camera ISP pipelines - getting high fidelity images from camera in Samsung smartphones.
- Construct novel AI models drawing from academic papers and adapting it to run in mobile device with limited memory and processing bandwidth.

RESEARCH EXPERIENCE

Program Learning from Demonstrations of Robot IIT Delhi

Prof. Rohan Paul, Prof. Parag Singla
Feb 2021 - June 2021

- Designed a neuro-symbolic architecture for an agent to learn a symbolic plan from natural supervision of instruction and corresponding video demonstrations of a robot performing the task. *Appeared in RSS-ROB Workshop 2021*

Modelling Human Behavior in 2-armed bandit tasks Google Research India, IIT Delhi

Dr. Pradeep Shenoy
Sept 2020 - Jan 2021

- Discovered a new approach to model human behavior on multiple variations of 2-armed bandit task which beats SOTA models on all existing behavioral datasets. *Appeared in CogSci2021*

Explainability in CommonsenseQA IIT Delhi, IBM Research India

Prof. Parag Singla, Dr. Dinesh Garg
Sept 2019 - Sept 2020

- Developed a 2 step general framework for explanation, first by generating a set of common sense facts, and then combining these to form a paragraph explanation. *Appeared in ACL-IJCNLP2021.*

Accelerating 2PC-based ML with Limited Trusted Hardware. University Of California, Santa Barbara

Prof. Trinabh Gupta
May 2019 - July 2019

- Designed a state of the art cryptographic protocol for server outsourced secure and private ML.

TEACHING EXPERIENCE

Teaching Assistant

Sep '20 - Jan'21

- Probability and Stochastic Processes, MTL106, Prof. Vikas Vikram Singh

TECHNICAL SKILLS

Languages: Python, C, C++, Java, Matlab – *10K + lines of code*

Tools: Pytorch, Android Studio, Git.

EXTRA-CIRRICULAR AND SOCIAL ACTIVITIES

School Plus, Village Internship

June '18 - July '18

- A one month stay and living in rural villages of Vrindavan to work for the holistic education of under-privileged kids. Developed educational content for them.

Himalayan Chipko Foundation

May '18

- 15 days stay under the guidance of environmentalist, J.P. Dabral, in the foothills of Himalayas to teach students in rural villages with limited opportunities.

Economics Club

Mar '18 - Mar '20

Executive and Coordinator of Economics Club activities.

Indoor Sports - Chess

Mar '18 - Mar '19

- Indoor Sports Representative. Organized and represented hostel in Chess competitions.

NSS, National Service Scheme: Volunteered in slum teaching projects and rural immersion trips.