

Amandeep Kaur

✉ akaurreehal@gmail.com [AmandeepKaurRe.github.io](https://github.com/AmandeepKaurRe)  Google Scholar

EDUCATION

Arizona State University

PhD in Computer Science, advised by Dr. Hannah Kerner

Aug'24 - Present

Indraprastha Institute of Information and Technology Delhi

Undergraduate student in Computer Science and Engineering

Jul'18 - Jul'22

GPA: 8.76/10.0

WORK EXPERIENCE

Google Deepmind, India

PreDoctoral Researcher advised by [Alok Talekar](#), [Dr. Gaurav Aggarwal](#)

Jul'22 - Jul'24

- Developed ML models to predict pan India crop maps using 10m resolution satellite imagery. Achieved 80% accuracy for top-10 crops. [Talk](#) at Google For India (G4I'22)
- Designed and developed data creation pipelines from scratch to process TBs of data for large scale model training.

Royal Bank of Scotland - Natwest Group

Software Engineer Intern

May'21 - Jul'21

- Reduced development & testing timeline by splitting the monolithic code base into separate layers, persisting intermediate outputs so the layers could be altered and tested individually.
- Cut company costs by replacing a data store between various front end systems and an internal ledger postings creation system, with an affordable alternative.

Midas Lab - IIITD

Student Researcher advised by [Dr. Rajiv Ratn Shah](#)

Aug'21 - Nov'21, Feb'22 - May'22

- Increased accuracy of a head gesture assisted typing technology from 86% to 92% by adding camera feeds to improve head-pose detection.
- Introduced self attention mechanism and new modalities like gyroscope and accelerometer to get another increase of 4%. [Demo](#), [Poster](#)

Human Machine Interaction(HMI) Lab - IIITD

Student Researcher advised by [Dr. Jainendra Shukla](#)

Aug'20 - Nov'20

- Designed speech data collection methodology for model training in Sakshar: an interactive system to help Indian children learn English pronunciation. This led to creation of a data collection web-app. [Demo](#)

PUBLICATIONS

1. [Agricultural Season Detection At Scale](#)

[Amandeep Kaur](#), [Aayush Patel](#), [Ishan Deshpande](#), [Gaurav Singh](#), [Alok Talekar](#).

American Geophysical Union (AGU), 2023 (Oral presentation).

SELECTED ACADEMIC PROJECTS

- **Food prices prediction** - 2023 | Python (sklearn) HungerHackathon'23 project where we used relevant topics in news articles to predict food price hikes in Niger, Africa
- **ClarityInCharity** - 2021 | Solidity, Web3, HTML/CSS/Javascript, Ganache A blockchain powered transparent charity platform where donors, beneficiaries and shops can join hands for greater good.
- **FightMate** - 2018 | Python (Libraries - OpenCV), Arduino A set of gloves and camera equipped cap that tracks opponent's hand movements and signals the user on which hand to use in order to punch/defend.

FEATURED POSITIONS

- **Host/Co-founder** @ [GitaMitra](#)
- **Speaker** @ Google For India(G4I'22) [Talk](#)
- **Host** for [Aayush Patel](#), Intern @ Google Research India (w/ [Ishan Deshpande](#))
- **Student Mentor** helping 8 new joining undergraduate students @ IIITD