

# Ritika Singh

[ritika291195@icloud.com](mailto:ritika291195@icloud.com)

[LinkedIn: ritika-singh](#)

## Education

---

**Ph.D. in Artificial Intelligence**, IIT Delhi Aug 2021 – Jun 2026  
Supervisor: Prof. Sumeet Agarwal, Dr. Alex De Figueiredo  
CGPA: 8.5 / 10  
*Relevant Courses:* Mathematical Foundations of CS, Data Mining, Research Writing, Adv. Machine Learning, Social Computing  
*Research Interests:* Computational Social Science, Bayesian Statistics, Cognitive Science

**M.Tech in Data Analytics**, IIIT Noida Aug 2017 – Jul 2019  
CGPA: 7.6 / 10

**B.E. in Computer Science**, Pune Institute of Computer Technology Aug 2013 – Jul 2017

## Awards

- 
- **TCS Research Scholar Fellowship** (2023–2027)
  - **Mitacs Globalink Research Award** (2024–2025)
  - **AstraZeneca's Young Health Programme (YHP) Changemaker Scholar** (30th AFS Youth Assembly - 2025)

## Published Work

---

[Bridging the Immunization Gap: Predictive Models for Zero-Dose and Vaccination Dropout in India](#)  
**Ritika Singh**, Mira Johri, Sumeet Agarwal *ACM COMPASS*, July 2025

[Quantifying the Role of Maternal Recall in Estimates of Routine Immunisation Rates in India: A Large-Scale Sub-National Bayesian Modelling Study](#)  
**Ritika Singh**, Alexandre de Figueiredo, Sumeet Agarwal, Misha Mishra, Devyani Agarwal *ACM COMPASS*, July 2024

[POSTER : Predictive Modelling of Zero-Dose Children and Vaccination Dropout in India Reveals Common Drivers of Immunisation Shortfalls](#)  
**Ritika Singh**, E. Spandana, Mira Johri, Sumeet Agarwal *Gavi Zero-Dose Learning Week*

[DATA STUDY REPORT : Exploring Multimorbidity and Patterns of Long-Term Conditions in England Using Open Prescription and Primary Care Data](#)  
**Ritika Singh**, Data Study Group Team 2023. *The Alan Turing Institute*

## Skills

---

**Languages:** Python, R

**Tools:** qGIS, GIT, PostgreSQL, MySQL, SQLite, Android Studio

## Experience

---

<b>Teaching Assistant, ScAI, IIT Delhi</b> Advanced Machine Learning (Aug 2023 – Ongoing) Bayesian Modelling (Jan – May 2023) Machine Learning (Aug – Dec 2021)	ongoing
<b>The AFS Youth Assembly</b> <a href="#">Delegate - AstraZeneca sponsored</a>	August 2025
<b>Globalink Research Award for research in Canada</b> Université de Montréal	May – July 2025
<b>UN and SIPRI Workshop</b> <a href="#">Responsible AI for Peace and Security</a>	Nov 2023
<b>The Alan Turing Institute - Data Study Group</b> <a href="#">Exploring Multimorbidity and Patterns of Long-term Conditions in England</a>	Mar 2023
<b>SRM Institute of Science and Technology</b> Assistant Professor – Artificial Intelligence	Jan 2021 – Aug 2021
<b>Deloitte USI (Risk and Financial Advisory)</b> Solution Delivery Analyst	Aug 2019 – Jan 2021
<b>Election Commission of India</b> Data Science and Statistical Expert	Jan 2019 – Aug 2019
<b>Reserve Bank of India (Strategic Research Unit)</b> Data Science Research Associate	Aug 2018 – Jan 2019

## Projects

---

<b>Understanding Inference in Immunisation Attitudes</b> (Ongoing) Multi-country study on how socioeconomic factors shape vaccine trust and behavior.
<b>Levels, determinants, and distribution of early childhood development in rural Uttar Pradesh, India</b> Developing machine learning models to identify the determinants of variations in ECD outcomes.
<b>Zero-Dose Prediction Using ML</b> Developing predictive models for early identification of zero-dose children.
<b>Geo-Spatial Modelling of Vaccine Coverage</b> Sub-national analysis to identify vaccination "coldspots" in India.
<b>ECI Projects</b> Lok Sabha 2019 Dashboard, Live data streaming and analysis; ARIMA, LSTM, Tableau.
<b>RBI Projects</b> Bhavantar Bhugtan Yojana, mobile banking adoption studies.
<b>Miscellaneous</b> News Aggregator (Hives Online) Android app dev.