

Utkarsh Bharadwaj

[Email](#) | [LinkedIn](#) | [GitHub](#) | [Portfolio Website](#)

About Me

Statistics student at the Indian Statistical Institute, Delhi, building tools around hypothesis testing, Bayesian inference, and convex optimization.

Education

Indian Statistical Institute

Bachelor of Statistical Data Science (BSDS)

Delhi, India

Aug 2025 – Present

- Score: **70.4%** (1st Semester); **84%** (2nd Semester)
- Coursework:** Probability Theory, Real Analysis, Statistical Inference, Optimization & Numerical Methods

Technical Skills

Languages: Python, R, $\text{\LaTeX}$

Libraries & Frameworks: NumPy, ggplot2, lattice

Statistical Methods: Poisson Processes, QP/Convex Optimization, Regression Analysis, Hypothesis Testing

Tools & Environment: Linux (Debian), VS Code, RStudio, GitHub

Languages Spoken: Maithili (Mother Tongue), Hindi (Native), English (Fluent, C1)

Projects

Neyman-Pearson Lab: Hypothesis Testing Tool | *Hypothesis Testing, MP Test*

July 2026

- Built an interactive web app deriving MP (Neyman-Pearson), UMP (Karlin-Rubin), and UMPU level- α tests for nine distribution families with KaTeX-rendered proofs.

CipherInk: Forensic Stylometry Platform | *Bayesian Inference, Statistical NLP*

June 2026

- Developed a full-stack forensic stylometry web app for authorship attribution using Poisson log-likelihood and Bayesian softmax on 70 filler words.

Beyond the Deficit: India's Trade Dynamics | *R, Time-Series Analysis, Macroeconomics*

May 2026

- Conducted a 35-year time-series analysis (1990–2025) of India's trade trends, evaluating currency and energy impacts using inflation-adjusted values.

Convex Optimization for LPG Allocation | *QP, Optimization Theory*

Apr 2026 – May 2026

- Formulated a strictly convex QP model allocating India's constrained LPG supply across sectors, minimizing weighted squared shortfalls using historical consumption data.

Certifications & Workshops

Indian Institute of Technology Ropar

NS2ML-DE 2026 Workshop

Ropar, India

Jul 6 – 10, 2026

- Covered numerical PDE/ODE solvers and Physics-Informed Neural Networks with MATLAB/Python labs.

Achievements

ISI Merit List: AIR **31** for BSDS | **JEE Main 2025:** **99.37** percentile in Mathematics (top 0.6%)

Hackathons (*Team Diazonium*): Vihaan 9.0 Finalist (DTU) | NIT Delhi UpVision Top 10/150+ teams