

KANUPRIYA JAIN

(M2 Student in Artificial Intelligence, Systems, Data)

CONTACT

 +33745767646

 kanupriya.jain@dauphine.eu

 <http://www.linkedin.com/in/kanupriya-jain-719781200>

 <https://github.com/kanu2406>

POSITIONS OF RESPONSIBILITIES

- **Council Member | Computer Science Society | St. Stephen's College** (Aug 2021 - Jun 2023)
- **General Secretary | Japanese Society | St. Stephen's College** (Jun 2021 – Jun 2023)
- **Member | Campus Placement Cell | St. Stephen's College** (Dec 2020 – April 2021)

TECHNICAL SKILLS

- HTML, CSS, Latex
- Python, Numpy, Pandas, Pytorch, Scikit-Learn, Tensorflow
- PostGres, SQL, Scala, PySpark
- C++, R Software
- Mathematica, WxMaxima

LANGUAGES

- **English** (Fluent – Full Working Proficiency)
- **Hindi** (Native Speaker)
- **French** (A0-A1 Level)

EXTRA-CURRICULARS

- **Dance:** Completed 4 years of classical Kathak with annual exams.
- **Art:** Managed an Instagram art page with 450+ followers.
- **Content Writing:** Wrote blogs on tech topics (e.g., Internet of Behaviours, Cloud Computing) and a blog on Anime history for Japanese society, St. Stephen's College
- **Volunteer:** Tutored Grade 4 student in Maths/Science and organized an online summer camp for children of non-teaching staff of St. Stephen's College

EDUCATION

PSL University (Mines, ENS, Dauphine) | Master 2 Artificial Intelligence, Systems, Data (IASD)

2024 – 2025

Relevant Coursework: Optimization for Machine Learning, Deep Learning for Image Analysis, Reinforcement Learning, Large Language Models, Data Aquisition and Extraction, Big Data for Machine Learning, NoSQL Databases

École Polytechnique, Institut Polytechnique de Paris | Master 1 Applied Mathematics and Statistics

2023 – 2024

Relevant Coursework: Machine Learning, Mathematical Statistics, Optimization, Python for Data Science, Databases, Functional Analysis, Probability Theory and Stochastic Process

GRADES: 15.80/20

St. Stephen's College, University Of Delhi | B.Sc. Hons. Mathematics

2020 – 2023

Relevant Coursework: Partial Differential Equations, Group Theory, Ring Theory, Real Analysis, Metric Spaces, Linear Programming

GRADES: 9.67/10

WORK EXPERIENCE

Research Intern | Privacy for Machine Learning | Criteo AI Labs [\[Link\]](#)

Apr 2025 – Oct 2025

- Worked on building algorithm for Efficient Mean Estimation under User Level Local Differential Privacy that uses noisy binary search for adaptive localization.

- Proved non-asymptotic bounds on expected squared error for both univariate and multivariate settings.

Research Intern | Study of Active Learning Algorithms | LPSM, Sorbonne Université [\[Link\]](#)

Jun 2024 – Aug 2024

- Implemented active learning methodologies from scratch by studying the research paper under the guidance of Prof. Christophe Denis.

- Implemented three different methods Query by Committee (QBC), Rejection Method and Uncertainty Sampling.
- Compared the implemented algorithms with already existing python libraries on synthetic and non-synthetic Datasets.

Summer Intern | Department Of Mathematics | Indian Institute of Technology Guwahati

Jun 2022

- Offline summer internship at IIT Guwahati under the guidance of Professor Anjan Kumar Chakrabarty
- Explored new topics and results including Normed vector spaces, Baire Category Theorem, Open Mapping Theorem

PROJECTS

Data Science Project | Adversarial Robustness in Deep Learning Models [\[Link\]](#)

Dec 2024

- Implemented adversarial training techniques (FGSM, PGD) and evaluated model robustness using AutoAttack in a deep learning setup.
- Enhanced accuracy-robustness trade-off using **MixedNUTS**, a training-free method combining standard and robust classifiers through nonlinear output mixing.

Data Science Project | Recommender Systems | Collaborative Filtering [\[Link\]](#)

Oct 2024

- Built a recommender system with matrix factorization using collaborative filtering

- Implemented Alternating Least Squares, Neural Collaborative Filtering and Probabilistic Matrix Factorization

Final Project – Machine Learning | Price Prediction in Airbnb: Model Comparison [\[Link\]](#)

Apr 2024

- Performed in-depth EDA and utilized regularization methods (Ridge, Lasso, Elastic Net) to enhance model accuracy for Airbnb price prediction.

- Implemented a variety of ML algorithms (decision trees, random forest, AdaBoost, XGBoost, neural networks) to develop robust prediction models

CERTIFICATIONS

- Online course on Digital Skills: Artificial Intelligence by **Accenture**

Jan 2022

- Online course on data analytics (Ask questions to make data-driven decisions) by **Google**

Dec 2021

- Online course on data analytics (Foundations: Data, Data, Everywhere) by **Google**

Oct 2021

- Participated in IWM Winter School for Women in Mathematics by **IIT Kanpur**

Dec 2021

- Participated in Summer School for Women in Mathematics and Statistics by **TIFR**

Jun 2022

COMPETITIONS

- Second Position in Math Me If You Can '23, a quiz competition | St.Stephen's College with over 200 registrations

- First position | 'X-Tra Innings', competition integrating mathematics and different aspects of cricket | Mathematics Society | St. Stephen's College with over 200 registrations

- Second position | 'Guesstimate' | Mathematics Society | St. Stephen's College with over 150 registrations

- Second position in '101 and Out', a Matharena organized by Jesus and Mary College

AWARDS AND HONOURS

- Awarded **Excellence Prairie Scholarship** from Dauphine-PSL University for M2 IASD.

- Awarded Dr. PB Bhattacharya Memorial Prize for securing **1st rank in a class of 44** in B.Sc. (H) Mathematics

- Awarded Prof. P.L. Bhatnagar Memorial Prize for the **Best Student** in B.Sc. (H) Mathematics

- Awarded Certificate of Merit from CBSE for being in top **0.1%** of successful candidates in English Core in Class XII