

# Debangi Ghosh

 [Github profile](#)
 [LinkedIn Profile](#)
 [Codeforces Profile](#)
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## EDUCATION

<b>Indian Institute of Technology (BHU), Varanasi</b>	<b>Nov 2022 - 2027</b>
<i>IDD (B.Tech - M.Tech) in Mathematics and Computing</i>	<i>CGPA: 9.30 (upto Sem-V)</i>
<b>Shiv Jyoti International School, Kota</b>	<b>2022</b>
<i>CBSE(XII)</i>	<i>98%</i>
<b>Saint Xavier's School, Raiganj</b>	<b>2020</b>
<i>ICSE(X)</i>	<i>97.8%</i>

## TECHNICAL SKILLS

**Competitive Programming : Specialist in Codeforces**

**Areas of Interest:** Competitive Programming, DSA, Operating Systems, Web Development, Machine Learning

**Languages:** C++, HTML, CSS, JavaScript, C, Python, Java, LaTeX

**Tools/Frameworks:** Git/GitHub, React, Angular, Node.js, Express.js, Bootstrap, Tailwind CSS, OpenCV, Tensorflow

## PROJECTS

- NLP-based Question Answering System for Tabular Data** [Github](#)
- Developed a flask based **ChatBot** and **Graph Plotter** using **Vanilla JavaScript**, a database backend using **SQLite** and integrated a **prompting NLP tool, Gemini API**.
  - It is a multilingual, responsive tool for tabular data analysis with a friendly UI/UX, capable of efficiently analyzing handwritten or printed table images, supporting multiple table schemas, and performing CRUD operations.
- Dark Pattern Detection with Transformer-based Models** | *Dark Pattern Buster Hackathon' 2023* [Github](#)
- Engineered a Python script leveraging fine-tuned transformer-based models (**BERT, XLNet, RoBERTa**) to detect and categorize dark patterns in textual data.
  - Extended functionality with a **web plugin** for visual highlighting of deceptive design elements.
- Customisation Integration on Myntra** [Github](#)
- Developed a platform for personalized product recommendations and customization options using Sketches or uploaded designs on Myntra.
  - Utilized Python, Flask, and TensorFlow for backend and HTML, CSS, and JavaScript for the frontend.
- Exploratory Project** | *Research Project at IIT BHU based on Neural Networks* [Drive Link](#)
- CNN based classification** of brain tumors using **MRI dataset**
  - Analysis of many **activation functions** and using the best fit for the same
- Focal Loss Refinement for Improved Machine Learning Accuracy** [Drive Link](#)
- Reviewed diverse **research papers** pertaining to loss functions, aiming to introduce innovative enhancements to the **focal loss** function.

## EXPERIENCES

**JPMorgan Chase CCB risk Modelling mentorship** Mentee

- Among the top 10 selected mentees all over India

**Amazon WoW** Mentee

**Open-Source Contributor** at [GirlScript Summer of Code'24](#)

[Github](#)

- Among the top 50 contributors of Gssoc'24 with 50+ Pull requests merged and 300+ contributions made.

**Tech Team Lead of Astronomy Club, IIT BHU**

**Google Step** Internship Finalist

- Cleared the coding round and the first interview round of the Google Step Internship.

## ACHIEVEMENTS

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- **Winner** of the **Woodpecker's Hackathon** organized by **Woodpecker Analytics and Services**, among 12K+ participants - [Certificate](#).
- **Winner** at **Round 3 (Final)** of the prestigious national **Crystal Ball event** organized by **Blue Yonder**, showcasing expertise in Natural Language Processing - [Certificate](#).
- **Winner** at **NLP.py**, a Machine Learning competition at **Optima, IIT Kharagpur** - [Certificate](#).
- **First runner-up** at **Oper-heimer** hackathon at **IIT Kharagpur**, based on **Optimization** - [Certificate](#)
- **First runner-up** at **Asteroid Venture** competition at **NSSC, IIT Kharagpur**, demonstrating proficiency in Astronomy and Business skills - [Certificate](#)
- Secured **All India Rank** of **5008** in **JEE Mains** and **4136** in **JEE Advanced** out of **1M+** candidates.
- Secured **3rd state rank** and **AIR 29** in International Olympiad Of **Mathematics'17** - [Certificate](#).

## POSITION OF RESPONSIBILITIES

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- Leading the **Technical Team** of the, [Astronomy Club](#), IIT (BHU) Varanasi.
- Public Relations Co-ordinator, [Technex'23](#), Technological Festival of IIT (BHU) Varanasi.
- [Induction Mentor'24](#), at IIT (BHU), guiding incoming freshers on academic and social matters.