

# Abhinav Tiwari

Bachelor of Technology

Motilal Nehru National Institute of Technology Allahabad, Prayagraj

My Portfolio

+91-7054425113

abhiitiwarii0@gmail.com

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## EDUCATION

- Motilal Nehru National Institute of Technology Allahabad** 2021-2025  
Bachelor of Technology CPI: **8.04**
- Intermediate | S.K.D. Academy** 2020-2021  
Central Board of Secondary Education, Uttar Pradesh Percentage: **95.6**
- Matriculation | S.K.D. Academy** 2018-2019  
Central Board of Secondary Education, Uttar Pradesh Percentage: **94.4**

## EXPERIENCE

- Shorthills AI** March 2025 - Present  
*SDE Intern* Gurugram, Haryana
  - Gained hands-on experience in **SQL**, **Python**, and **Advanced Excel** for data handling and **Generative AI**.
  - Developed AI-driven solutions including **Retrieval-Augmented Generation** pipelines and custom **OCR models**.
  - Performed **sanity testing** and **unit testing** using Python scripts and SQL queries.
  - Fixed bugs** and performed **frontend/backend testing** on **client onboarding projects**.
  - Queried and analyzed complex databases using **DBeaver**, enhancing understanding of large-scale data systems.

## PROJECTS

- Multimodal Learning for Hinglish Meme Classification** GitHub  
*Built a sentiment analyzer using the Memotion 3.0 dataset, leveraging both text and image features.*
  - Tools & Technologies:** Python, TensorFlow, Keras, Pandas, NumPy, Matplotlib.
  - Combined DistilBERT-Multilingual for text and VGG16 for image processing in a multimodal model.
  - Performed sentiment and emotion classification, achieving an overall F1-weighted score of **78.82%**.
  - Greatly improved over unimodal models in Humor (**90.04%**) and Motivational (**95.62%**) categories.
- Healthcare Record Management System** GitHub  
*Developed a web-based system with secure document storage and health data analytics.*
  - Tools & Technologies:** HTML, CSS, JavaScript, Node.js, Express, Python, MongoDB, Web3.storage.
  - Implemented distributed document storage with access control and token-based retrieval.
  - Enabled hospital-only uploads and patient-level analytics: vaccination rates, chronic disease spread, BMI trends.
- Handwritten Digit Recognition Model** GitHub  
*Built a neural network from scratch for classifying handwritten digits (MNIST dataset).*
  - Tools & Technologies:** Python, NumPy, Pickle, Matplotlib, Keras (dataset).
  - Implemented ReLU activation, Softmax output layer, and forward/backward propagation manually.
  - Achieved **93% accuracy** through gradient descent and weight optimization.

## TECHNICAL SKILLS

**Languages:** Python, C++, C

**Developer Tools:** VScode, Excel, Jupyter, Spyder, Git, pip, npm

**Frameworks:** ExpressJS

**Soft Skills:** Communication, Time-Management, Problem-Solving, Collaboration, Creativity, Adaptability, Empathy

**Coursework:** Data Structures and Algorithms, Web Development, Machine Learning

## INTERESTS

- Data Science and Analytics
- Machine Learning
- Mathematics
- Puzzling and Quizzing
- Artificial Intelligence
- Debating
- Competitive Programming
- Data Structures and Algorithms

## ACHIEVEMENTS

- Received a LOR at BPCL CRDC for my performance during the internship. August, 2024
- Winner of Chemathlon under Rasayan in Avishkar March, 2024
- Winner (team) of Gnosis India Quiz August, 2022
- 2-year consecutive gold medal winner in Annual Athletics Meet in Shot-put

## POSITIONS OF RESPONSIBILITY

- **Training and Placement Representative** of the batch 2025.
- Member of **Expanding Horizons 5.0** (under Student Mentorship Program).
- Member of Hospitality Team in **gnoTalks 2024**.