Abhinav Tiwari

Bachelor of Technology

Motilal Nehru National Institute of Technology Allahabad, Prayagraj

Abhinav-21 abhinav-tiwari-mnnit

■ abhiitiwarii0@gmail.com

→ +91-7054425113

2021-2025

2020-2021

2018-2019

Percentage: 95.6

Percentage: 94.4

♠ My Portfolio

EDUCATION

•Motilal Nehru National Institute of Technology Allahabad

Bachelor of Technology CPI: 8.04

•Intermediate | S.K.D. Academy

Central Board of Secondary Education, Uttar Pradesh

•Matriculation | S.K.D. Academy

Central Board of Secondary Education, Uttar Pradesh

EXPERIENCE

• Shorthills AI

March 2025 - Present

SDE Intern

— Gained hands-on experience in SQL, Python, and Advanced Excel for data handling and Generative AI.

- Developed AI-driven solutions including Retrieval-Augmented Generation (RAG) pipelines and custom OCR models.
- Performed sanity testing and unit testing using Python scripts and SQL queries.
- Queried and analyzed complex databases using **DBeaver**, enhancing understanding of large-scale data systems.

PROJECTS

•Financial Insights Dashboard (Excel and Power BI)

Built a semi-automated financial tracker with visual analytics for expense management and reporting.

- Tools & Technologies: MS Excel, Power BI, Pivot Tables, Conditional Formatting, Data Validation.
- Automated income/expense tracking with category tagging, month-end carry-forward, and data validation.
- Created Pivot Tables, Pie Charts, and Power BI dashboards to visualize financial trends.
- Applied dynamic formatting and summaries to highlight spending patterns and financial health.

Document Processing Automation using OCR and RAG

GitHub

Developed an AI-powered system to extract, process, and retrieve document information for business automation.

- Tools & Technologies: Python, Transformers, Tesseract OCR, LangChain.
- Automated document data extraction and intelligent retrieval using OCR with Retrieval-Augmented Generation (RAG).
- Reduced manual document review effort, enabling faster access to key information.

•Handwritten Digit Recognition Model

 $\mathbf{Git}\mathbf{Hub}$

Implemented and trained a fully-connected neural network from scratch to classify handwritten digits (MNIST dataset).

- Tools & Technologies: Python, NumPy, Pickle, Matplotlib, Keras (dataset).
- $\ \ Implemented \ core \ components \ including \ \textbf{ReLU} \ \textbf{activation} \ \ \text{and} \ \ \textbf{Softmax} \ \ \text{output} \ \ \text{layer} \ \ \text{for multi-class} \ \ \text{classification}.$
- Achieved 93% accuracy by optimizing weights using backpropagation and gradient descent (GD).

TECHNICAL SKILLS

Languages: Python (LinkedIn Certified Top 5%), SQL, C++, C

Technologies: Data Warehousing, ETL Pipelines, Transformer Models, LLMs, RAG

Developer and Analytics Tools: VSCode, Power BI, MS Excel, Jupyter Notebook, Spyder, MySQL, Git

Cloud/Big Data Tools: AWS (Basics), Apache Spark (Basics)

Soft Skills: Critical Thinking, Data-driven Decision Making, Troubleshooting, Communication, Collaboration

INTERESTS

• Data Science and Analytics

• Machine Learning

• Mathematics

• Puzzling and Quizzing

• Generative AI

• Debating

ACHIEVEMENTS

• Got an LOR from Bharat Petroleum CRDC and TPO MNNIT.

August, 2024

· Winner of Just in Case under Nirmaan in Avishkar

March, 2024

• Winner (team) of Gnosis India Quiz

August, 2022

• Winner Chemathlon under Rasayan (Mock Placement Drive)

March, 2024

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**.