Nikhil Tanwar

Passport: T7359742 | **Date of birth:** 01/07/2001 | **Place of birth:** New Delhi, India | **Nationality:** Indian |

Phone number: (+91) 9560960989 (Mobile) | **Email address:** nikhil.tanwar48@gmail.com |

Address: Block D, H.No.-105, First Floor, Sector 8, Dwarka, 110077, New Delhi, India (Home)

ABOUT ME

Highly motivated Computer Science graduate with a strong analytical mindset and a deep interest in data-driven technologies. Passionate about problem-solving, research, and leveraging computational techniques for real-world applications. Experienced in software development, machine learning, and data analysis, with hands-on expertise in programming, cloud computing, and AI frameworks. Enthusiastic about expanding knowledge and applying innovative solutions in the field of technology.

EDUCATION AND TRAINING

01/10/2020 – 07/12/2024 Noida, India
BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE Bennett University

Website https://www.bennett.edu.in/ | **Level in EQF** EQF level 6

30/11/2021
PYTHON 101 FOR DATA SCIENCE cognitiveclass.ai Powered by IBM Developer Skills Network.

Website https://courses.cognitiveclass.ai/certificates/b430e1ba23934157a47225e9ce7d2710

01/12/2021 – 01/02/2022
USABLE SECURITY - UNIVERSITY OF MARYLAND Coursera

Website https://www.coursera.org/account/accomplishments/verify/3UXUWDQBXKZ3

01/03/2022 – 23/04/2022
RESPONSIVE WEB DESIGN FreeCodeCamp

Website https://www.freecodecamp.org/certification/NikhilTanwar/responsive-web-design

01/07/2022 – 27/08/2022
FUNDAMENTALS OF DEEP LEARNING Nvidia

Website https://learn.nvidia.com/certificates?id=5wqzDmK4QcSYFapeqmARtg

01/08/2022 – 21/09/2022
FUNDAMENTALS OF ACCELERATED COMPUTING WITH CUDA PYTHON Nvidia

Website https://learn.nvidia.com/certificates?id=hM7y_GqMTfq2iw5IEl6IFA

01/12/2022 – 01/05/2023
GOOGLE DATA ANALYTICS SPECIALIZATION Coursera

Website https://www.coursera.org/account/accomplishments/specialization/certificate/JL5FM4FNS2XF

18/04/2023 – 21/04/2023
INTRODUCTION TO APPLIED CRYPTOGRAPHY- UNIVERSITY OF LONDON Coursera

Website https://coursera.org/share/c6ead064241ff382aea6522cda97d939

01/04/2023 – 30/04/2023
CRYPTOGRAPHY - UNIVERSITY OF MARYLAND, COLLEGE PARK Coursera

Website https://coursera.org/share/5cd75414568ae21b7ca6f4fa8786e771

01/05/2023 – 22/11/2023
GOOGLE CYBER SECURITY Coursera

Website https://coursera.org/share/2204f9575bad370ace2aa65f2b83ea7f

01/08/2023 – 23/11/2023
DEEP LEARNING FOR HEALTHCARE - UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN Coursera

Website https://coursera.org/share/da17bee24279a7b0abc30e3fcf8c29da

WORK EXPERIENCE

10/05/2023 – 10/07/2023 Uttar Pradesh, India
UNIVERSITY TEACHING ASSISTANT BENNETT UNIVERSITY

- Mentored **30+ students** in introductory **machine learning** concepts.
- Assisted with **course materials, tutorials, assignments, and project guidance.**

LANGUAGE SKILLS

Mother tongue(s):   **HINDI**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
GERMAN	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Microsoft Office | programming: Python, MATLAB and SQL | C / C++ / C+ | Basic Ruby and Java programming | Data Visualization (Tableau, Power BI) | Platform : AWS Cloud | Python(Pandas Matplotlib Seaborn Pytorch Tensorflow) | GIT version control, Linux Command | Version Control Systems: Github | Shell Scripting/Batch Scripting languages (intermediate)

PROJECTS

01/05/2021 – 01/10/2021
StockDoc – Stock Price Prediction

- Extracted stock data using **Yahoo Finance API** and performed data preprocessing.
- Built a **stock price prediction model** using machine learning.

01/06/2022 – 01/11/2022
Heart Disease Analysis

- Conducted data exploration and **feature engineering** on cardiovascular datasets.
- Developed a **high-accuracy ML model** for heart disease prediction.

01/01/2023 – 01/05/2023
Steganography Using Python

Developed a **data encryption tool** using **Python & PIL library** for secure data transmission.

01/01/2024 – 01/05/2024
QR-Code Login system

A Laravel-based application that implements QR code authentication for user login
-
  - **QR Code Generation:** Each user is assigned a unique QR code, generated using the QrCode package, which serves as their authentication credential.
  - **QR Code Scanning:** Users can log in by scanning their unique QR code using a device camera, facilitated by the html5-qrcode library.
  - **User Authentication:** Upon scanning, the application verifies the QR code against stored credentials and authenticates the user using the Sentinel package.
  - **Laravel Integration:** The project integrates seamlessly with Laravel's MVC architecture, utilizing controllers and views for QR code login functionality.
  - **Security Measures:** Implements secure authentication by generating unique QR codes and utilizing bcrypt hashing for QR code credentials.
  - **User-Friendly Interface:** Provides a straightforward interface for users to scan QR codes and access their accounts efficiently.

This project showcases the integration of QR code technology into a Laravel application, enhancing user authentication methods.

PUBLICATIONS

2024
Efficient and Secure Blockchain-Based Homomorphic Encryption for Intelligent Transport Systems

- Developed a **fog-based ITS** with a congestion routing management system to enhance security and efficiency.
- Addressed **data processing costs, transmission security, and confidentiality vulnerabilities**.
- Presented at **TRA 2024, Dublin**, with final print publication underway in **Springer Journals**.

Mr. Nikhil Tanwar and Dr. Saurabh Rana

CONFERENCES AND SEMINARS

15/04/2024 – 18/04/2024 Dublin, Ireland
Presenter – Transport Research Arena (TRA) 2024

Presented research on **Efficient and Secure Blockchain-Based Homomorphic Encryption for Intelligent Transport Systems** at **TRA 2024**, Europe's largest transport research and innovation conference. Discussed the **application of cryptographic techniques and blockchain for secure data transmission and congestion management in intelligent transport systems (ITS)**. Engaged with experts in **mobility, AI-driven security, and digital infrastructure** to explore the future of smart and resilient transportation networks.

VOLUNTEERING

01/06/2023 – 01/05/2024 India
Volunteer – Vanshika Welfare Society

Actively contributed to **educating underprivileged children** and **raising awareness about critical health issues like thalassemia** through community outreach programs. Engaged in **teaching, organizing awareness campaigns, and fundraising activities**, helping to create a **positive social impact**. These experiences have strengthened my **teamwork, leadership, and communication skills**, reinforcing my dedication to social responsibility and community development.