Anshita Dhoot

Greater Noida, Uttar Pradesh
Contact No: +91-8955241400; **Email:** Anshita.dhoot.23@gmail.com
Linkedin: https://www.linkedin.com/in/anshita-dhoot-bba2295a/

PROFILE

- ✓ During freelancing, I was working on multiple projects of multiple vendors, which included smart vehicles, drones, LLM models, ML models, Congestion Problems, Intrusion Detection systems, and many other different projects based on Python coding, many a time, others too.
- ✓ Cyber Security, Authentication, Security, WBAN, and some knowledge about Machine Learning and Artificial Intelligence, Arduino, and Cryptographical technologies, where I have recently worked. Along with it, I worked as an R&D Coordinator and Cyber Security & Network Engineer.
- ✓ I have worked on the LLM model, BAN, Healthcare, and sensors during my research.
- ✓ I have also worked on certification standards such as ISO 27001, ISO 9001, PCI DSS, and others.
- ✓ Recently, I have worked on techniques for preventing Jamming and Spoofing, Tactical Identification of Friends and Foes, and Security protocol design for radio communication through radio frequency.
- ✓ In cryptography, I have recently been working on the encrypting and decrypting functions of the existing protocol and how to enhance hardware and software security to secure data (offline and online).
- ✓ I have worked on Embedded C and C++ to code for the following projects during the time of connecting software and hardware (by using Arduino and Raspberry Pi3). Also, my earlier projects were based on Python and Keras libraries.
- ✓ Along with that, I have worked on security protocols during the time of radio communication and signal process (usually for Military services).
- ✓ I am a passionate Computer Science Engineering Assistant Professor who worked at different educational institutes with a gratifying teaching/research career of 7 years.
- ✓ Explored and experimented with innovative security models and worked on better treatment facilities at hospitals and homes for patients and old age people by making a better technological world.
- ✓ We have demonstrated professional excellence in providing comprehensive /clean education to ensure the all-around development of the campus environment.
- ✓ Recipient of several awards in recognition of services rendered in education and writing.
- ✓ Versatile professional with a strong academic background, having several research works, publications & presentations, conferences, journals, (technical and non-technical) books, and significantly contributing to developing course curriculum.
- ✓ Versatile experience in various positions like a lecturer, Assistant Professor, Account officer, writer, etc.

Skills and Certifications

- Programming Language: Python, MATLAB, C, C++, Arduino, Embedded C
- Data Visualisation: Matplotlib, Seaborn, Keras, Tensor Flow.
- Machine Learning
- Radio Communication
- Operating System Hardening
- Networking attacks and cyber security
- IDE: Jupyter notelbook, google colab, IDLE

Area of Research: Application of Machine Learning and Artificial Intelligence (AI) in Smart homes, hospitals or cities, Security towards IoT Data, WBAN enhanced techniques for Alzheimer's, Dementia & Parkinson's suffering patients.

PhD Research Topic: "Research & Development of Intrusion Detection System for Online Banking

Masters Research Topic: "RFID Authentication"

Education Qualification:

PhD. Computer Sciences & Engineering, Moscow Institute of Physics & Technology, Moscow, Russia

Cyber Security, Radio Engineering & Communication Technology

The research includes IDS detection to protect public systems such as the banking system from being attacked by rare intrusions, network intrusions, and other kinds of intrusion to protect user data and make it safer than before. In this, we are using genetic programming with machine learning to make the system better to use. The work includes network security at gateways and also on wireless networks.

Project Completed:

1. **Title: GPSVM for Wireless Intrusion Detection System, at MIPT (2020-2021)**

Use Case: **GPSVM (Genetic Programming Support Vector Machine). We have developed this model and compared it with the SVM model, which shows that the working of the GPSVM model is better than others because it gives highly precise values and is capable enough to detect any cyberattack.**

Skills Used:

- Python(Numpy, Pandas, Keras, **scikit-learn**), GPSVM.IDE: Jupyter, Google Colab

- **Objectives: To perform the IDS-enhanced version to make a strong detection system for wireless networks.**
- **To prepare data and fit in the GPSVM model to stop the detection of an unauthorised user.**

2. **Title: Efficient and Compressive IoT-based Healthcare System for Parkinson's Disease Patient, at JNU (2016-2019)**

Use Case: **We have proposed a model for Parkinson's Patients so that they can live their routine lives at ease by replacing dead neurons with the help of AI. We have introduced an architecture to work on the brain using several chips, which help send signals and become a mediator/transmitter.**

Skills Used:

- Arduino, EEG Sensors, Bluetooth interfacing devices, Raspberry Pi, and Python

- **Objectives: To provide a new architecture to help Parkinson's patients by using an EEG**
- **To develop an architecture to support smart hospitals, also to reduce the complexity of the IoT**

M. Tech. Computer Sciences & Engineering, Banasthali University, Jaipur, Rajasthan, India

Thesis: RFID Authentication, where we have tried to identify the best methods to protect the home and hospital environment to protect it from attacks by using cryptographic methods. To create a smart home and smart hospital environment to protect against several known and unknown attacks at the time of the authentication gateway. My research was conducted at Jawaharlal Nehru University, Delhi, India.

B. Tech. Computer Sciences & Engineering, Apex Institute of Engineering & Technology, Rajasthan, India

Apex Institute of Engineering& Technology, Rajasthan Technical University, Jaipur

Project: Snake Xenia, HCL Pvt. Ltd., Noida, Delhi 45 Days (May-June 2012)

CAREER HIGHLIGHTS

Recognized with various Awards Like

- ✓ **RFID Authentication**, ISBN of the book is 978-613-9-87149-0. The Lambert Academic Publishing House has published it.
- ✓ Record holders of National and International awards such as Amazon Books of Records, OMG Books of Records, International Books of Records, BTC Awards, etc. for writing books and motivating people towards life.
- ✓ Compiled and Edited 8 anthologies, wrote 2 novels, 2 poetry books and 1 technical book.
- ✓ **Poems** and **Ehsaas Jeevan ke and Life Tantrums** are poetry books in the languages Hindi and English, respectively.
- ✓ Co-author of the novels such as **Maples** (winning of Vajra world record), **Karvi**, **Elaichi**, etc.
- ✓ Submitted a review paper on the ***Use of GIS-based Robotics***, in SGVU C3W Souvenir 2015, 4th International Convention & Green Industries Expo held at Suresh Gyan Vihar University, Jaipur, India

EXPERIENCE RECITAL

Assistant Professor, Noida International University, Greater Noida, India **08/2025 - Present**

Freelancer (worked with multiple companies) **05/2024 – 07/2025**

CIRUS Group of Companies, Gurugram, Haryana **08/2023-05/2024**

Researcher, Moscow Institute of Physics and Technology, Moscow **08/2021-08/2022**

Jawaharlal Nehru University, New Delhi **07/ 2016-09/2019**
Researcher (School of Computer & Systems Sciences Department)

Rajasthan Institute of Engineering & Technology, Jaipur **2018-2019**
Assistant Professor (Computer Science Engineering Department)

India Infoline Private Ltd. **02/2014-06/2015**
Senior Account Officer (Kota, Jaipur)
Career Path:
Researcher **2016-2024**

Key Deliverables

- ✓ Planned and mobilized resources to ensure the all-round development of the campus, covering infrastructure, faculty, education, and sports environment.
- ✓ Motivated and guided several groups of students during the time of B. Tech and M. Tech projects (Major and Minor).
- ✓ Secured all statutory clearances from regulatory authorities and recruited faculty/administrative staff to set the ball rolling.
- ✓ Ensuring adequate maintenance of the entire infrastructure and facilities of the college by concluding maintenance contracts with reputed service providers.
- ✓ Conceptualized and implemented image-building exercises for the institution to maximize enrollment and ensure its operational viability.
- ✓ Successfully running the institution and imparted it a strong positive image in the Education industry.
- ✓ Providing strategic inputs and vision & mission to implement new and advanced educational technologies.
- ✓ Developing administration budget for smooth management of the entire college infrastructure and facilities.
- ✓ Enforcing strict discipline and ensuring general compliance with office systems and procedures.

PERSONAL DETAILS

Date of Birth: 23rd September 1991; **Language Proficiency:** Hindi, English, Russian;
References: Available on request

ANNEXURE-I

Paper Publications

Paper Published

- ✓ Agarwal, R., Dhoot, A., Kant, S., Bisht, V.S., Malik, H., Ansari, M.F., Afthanorhan, A. and Hossaini, M.A., 2024. **A novel approach for spam detection using natural language processing with AMALS models**. *IEEE Access*.
- ✓ Dhoot, Anshita, A. N. Nazarov, and Alireza Nik Aein Koupaei. "**A Security Risk Model for Online Banking System**." *2020 Systems of Signals Generating and Processing in the Field of on-Board Communications*. IEEE, 2020.
- ✓ Dhoot, Anshita, Nazarov, A.N. "**A Survey of Internet of Things**", In 2020 SynchoInfo Journal, pp 25-32, 2020.4
- ✓ Anshita Dhoot, Nazarov A.N. ***A survey on cyber-space: attacks, challenges & security***. *Vestnik*

NTsBZhD. 2021; (2): 72–81.

- ✓ Dhoot, Anshita, Rahul Deva, and Varun Shukla. "**A Novel Security Model for Healthcare Prediction by Using DL**." *International Conference on Cryptology & Network Security with Machine Learning*. Singapore: Springer Nature Singapore, 2023.
- ✓ Dhoot, Anshita, Kristi Shumka, M. Salman Saeed, and A. N. Nazarov. "**MULTI FACTOR AUTHENTICATED SECURE DIGITAL LOCKER USING GSM**."
- ✓ Dhoot, Anshita, Manisha Manjul, Sonam Kaul Devgan, and A. N. Nazarov. "**Enhanced lightweight and secure session key establishment protocol for smart home inhabitants**." *Journal of Discrete Mathematical Sciences and Cryptography* 24, no. 5 (2021): 1327-1335.
- ✓ Дхут, А., А. Н. Назаров, and И. М. Воронков. "**Модель GP SVM для беспроводной системы обнаружения вторжений.**" *Russian Technological Journal* 10.6 (2022): 20-27.
- ✓ Dhoot, Anshita, A. N. Nazarov, and Tayyab Khan. "**Enhanced Lightweight and Secure Session Key Establishment Protocol for Smart Hospital Inhabitants**." *Journal of Information Technology Management* 14. Security and Resource Management Challenges for Internet of Things (2022): 147-158.
- ✓ Pathak, Vinay, Karan Singh, Ahmed Aziz, and Anshita Dhoot. "**Efficient and Compressive IoT-based Health Care System for Parkinson's Disease Patient.**" *Procedia Computer Science* 167 (2020): 1046-1055.
- ✓ Pathak, Vinay, Karan Singh, Sudhanshu Aggarwal, and Anshita Dhoot. "**Ensuring security framework for WBANs**." *Journal of Discrete Mathematical Sciences and Cryptography* (2021): 1-14.
- ✓ Nazarov, A. N., Alireza Nik Aein Koupaei, Anshita Dhoot, Asyraf Azlan, and Seyed Milad Ranaei Siadat. "**Mathematical Modelling of Infrastructure as a Service.**" In *2020 Systems of Signals Generating and Processing in the Field of on Board Communications*, pp. 1-6. IEEE, 2020.

Expert Lecture Conducted:

- Expert Lecture at a five-day International Faculty Development Programme on Emerging Trends in AI and Data Science Application organized by the Department of Computer Engineering at Poornima College of Engineering, Jaipur, from 12th December 2022 to 16th December 2022.

Subjects Taught:

- Undergraduate Level: Basic Computer Science Engineering, E-commerce, Cyber Security, Python, Operating System, C, C++, ADBMS, Operating System and others
- Post Graduate level: MATLAB for neural networking, MATLAB for cyber security.

Anshita Dhoot **Date: 29/11/2025**