

AYUSH SINHA



✉ sinhaayush0806@gmail.com

☎ +91 9708700626

🔗 [linkedin.com/in/sinhaayush0806](https://www.linkedin.com/in/sinhaayush0806)

PROFESSIONAL SUMMARY

I am Ayush Sinha, a third-year Bachelor of Technology student in Information Technology at B.K. Birla Institute of Engineering and Technology, Pilani. Passionate about Artificial Intelligence, Data Science, and Machine Learning, I am actively expanding my expertise in these fields through continuous learning and hands-on projects. I thrive on connecting with like-minded professionals, engaging in meaningful discussions, and collaborating on innovative solutions that enhance my technical and problem-solving skills.

EDUCATIONAL QUALIFICATIONS

- **Bachelor of Technology in Information Technology**
B.K Birla Institute of Engineering and Technology, Pilani, Rajasthan.
2022 - Present
- **Intermediate (Bihar School Examination Board)**
R.R Inter College, Vaishali, Bihar.
2020 - 2022
- **Matriculation (Central Board of Secondary Education)**
Holy Cross Public School, Muzaffarpur, Bihar.
2020

SKILLS

Technical Skills :

- **Programming Languages:** C Programming, Object-Oriented Programming (OOP) using C++, Python
- **Software & Tools:** Qt Designer, Visual Studio Code, Git, Anaconda, Jupyter Notebook, Spyder, PyCharm Community
- **Database Management:** MySQL – Experienced in designing, managing, and querying relational databases for efficient data storage and retrieval

Soft Skills :

- **Effective Communication:** Strong verbal and written communication skills for collaboration and presentations
- **Teamwork & Collaboration:** Ability to work effectively in diverse teams and contribute to collective success
- **Problem-Solving:** Analytical mindset for approaching complex challenges with logical and innovative solutions
- **Leadership & Initiative:** Proven ability to lead projects, make strategic decisions, and guide peers toward success

INTERNSHIP AND TRAINING

- **In-House Summer Internship on C Programming (15 Days)**

B.K. Birla Institute of Engineering and Technology, Pilani

- Gained foundational knowledge of C programming, covering syntax, data types, control structures, and functions.
- Developed small projects to apply concepts such as loops, arrays, and pointers.

- **Industrial Training & Internship on Programming with Python (45 Days)**

Internshala, Gurgaon

- Gained expertise in Python programming, covering fundamental to advanced topics.
- Mastered variables, data types, control structures, and object-oriented programming (OOP).
- Developed skills in SQLite database management, enabling efficient data storage and retrieval.
- Built a Graphical User Interface (GUI) using PyQt, integrating front-end functionality with Python.
- Explored the application of Python in various domains, enhancing problem-solving capabilities.
- I completed a final project, applying all the concepts I learned to create a fully functional Python-based application.
- Gained insights into AI in Python, understanding its role in intelligent automation and decision-making.

CERTIFICATIONS AND WORKSHOPS

Certifications:

Completion of Python 3.4.3 Training – Indian Institute of Technology, Bombay

- Acquired skills in Python programming, syntax, data structures, and real-world applications.

Completion of Java Training – Indian Institute of Technology, Bombay

- Developed proficiency in Java programming, covering OOP principles, data handling, and application development.

Programming with Python – Internshala Trainings

- Hands-on experience in Python programming, automation, and scripting.

Internship & Job Preparation – Internshala Trainings

- **Skills gained:** Resume writing, organization skills, and career preparation.

Workshops & Participation:

- **AI/ML Workshop** – Explored core concepts of Artificial Intelligence & Machine Learning, including model training and real-world applications.
- **IoTCON Workshop on IoT** – Hands-on experience with Internet of Things (IoT) technology, sensor integration, and real-time data processing.

1. Split Bill Calculator:

Developed a command-line application that calculates the amount each person needs to pay when splitting a bill, including tip calculation. Implemented user input validation, rounding operations for currency, and mathematical operations using Python. Designed for quick usability with real-time input feedback.

Key Features:

- Accepts total bill amount, number of people, and desired tip percentage.
 - Calculates each individual's share accurately.
 - Handles input errors gracefully.
-

2. Rock Paper Scissors Game:

Built an interactive terminal-based game that lets users play Rock, Paper, Scissors against a computer. Used randomization techniques, conditional logic, and modular coding practices to create an engaging experience.

Key Features:

- Incorporates Python's random module to simulate the computer's choice.
 - Clean and readable game loop structure.
 - Score tracking and clear result display.
-

3. Black Jack Game:

Created a simplified version of the Blackjack card game with the core game logic and realistic player vs. computer interaction. Applied control flow, loops, and data structures like lists and dictionaries for deck management.

Key Features:

- Simulates real blackjack rules (e.g., hit, stand, bust logic).
 - Automatically calculates hand totals and determines winners.
 - Card deck is shuffled, and dealt cards are tracked.
-

4. Coffee Machine Simulator using OOP:

Python (Object-Oriented Programming), Designed a coffee machine simulation using OOP principles. Structured the application with multiple classes to manage menu options, coffee-making logic, user interaction, and resource management.

Key Features:

- Implemented classes for Menu, CoffeeMaker, and MoneyMachine.
 - Encapsulated logic for brewing coffee, checking resources, and handling payments.
 - Enhanced code readability and reusability with OOP practices.
-

5. Quiz Game:

Developed an interactive quiz game using Python classes and loops. Integrated object-oriented programming to build a robust quiz engine that supports multiple-choice questions and real-time scoring.

Key Features:

- Uses external data (question bank) for dynamic quizzes.
- Displays current score after each question.
- Clean UI/UX on the console with question and answer prompts.