




# SHREYA SINHA

 [github.com/shreya3152](https://github.com/shreya3152) |  [linkedin.com/in/shreya-sinha](https://www.linkedin.com/in/shreya-sinha) |  [shreyasinha3152@gmail.com](mailto:shreyasinha3152@gmail.com)

## SUMMARY

Detail-oriented graduate with hands-on experience in Python, Java, SQL, and academic projects in Machine Learning, and data structures and enthusiasm to apply problem-solving skills in a dynamic, impactful environment.

## TECHNICAL SKILLS

- **Languages:** Python, Java, SQL
- **Framework:** Pandas, Numpy, Matplotlib, sklearn
- **Web Development:** HTML, CSS, JavaScript, MVC
- **Tools:** VS Code, PyCharm, Apache NetBeans, Google Colab

## WORK EXPERIENCE

- **Software Developer – Intern** | [Link](#) **17 May 2022 to 16 July 2022**  
**Arinsys Enterprise Solutions Private Limited**
  - **Overview:** Arinsys is an IT Services startup dealing with IT consultation focusing on creating SaaS products and marketplaces for other developers
  - **Responsibilities:** Built Web components of a Business-to-business website. Experienced and closely observed the building of a real-time E-commerce website from scratch. Shared my valuable knowledge and provided mentorship to junior team members.
  - **Technology Used:** ASP.NET Core Blazor with .NET 6.

## PROJECTS

- **Network Anomaly Detection using Autoencoders and Reinforcement Learning** **Present**
  - **Overview:** Developed a network anomaly detection system using integrated Autoencoder and Reinforcement Learning model. Designed a structured comparative study to understand the best combination of both that can be used to get more accuracy in anomaly detection..
  - The Autoencoders are used for feature extraction, and the Reinforcement learning model is used for decision-making in the network environment.
- **Sentiment Analysis on online reviews for B2B/B2C web applications** **Present**
  - **Overview:** Developed a Sentiment Analysis model which recognizes the words given by the user and classifies it as Positive or Negative feedback. Used publicly available Amazon Alexa reviews dataset and applied different algorithms to obtain maximum accuracy. Used Random Forest Classifier, which achieved high accuracy on both the training and testing datasets. The training accuracy was notably close to 99%. Currently working on using different datasets to better train the model and achieve better accuracy and avoid overfitting.
  - **Technology Used:** Random Forest, XGBoost, NLP

## PATENT

- **202541051273 - Reinforcement Learning-Based Autonomous Water Management System**  
**Overview:** proposed a technically advanced irrigation control system featuring a local reinforcement learning engine that processes a multi-dimensional state vector (including soil, aquifer, climate, and crop parameters) to generate optimal irrigation actions in real-time.

## EDUCATION

- |  |                                      |
|--|--------------------------------------|
| • <b>Masters in Computer Application</b><br>Vellore Institute of Technology, Vellore | <b>2024 - 2026</b><br>CGPA: 8.89     |
| • <b>Bachelor of Computer Application</b><br>Birla Institute of Technology, Mesra    | <b>2021 - 2024</b><br>CGPA: 8.97     |
| • <b>CBSE XII</b><br>Creane Memorial High School, Gaya                               | <b>2019 -2021</b><br>Percentage: 91% |
| • <b>CBSE X</b><br>Elegant Public School, Gaya                                       | <b>2019</b><br>Percentage: 96.6%     |

## CERTIFICATION

- **Practical Reinforcement Learning using Python** | [Link](#) : learned about creating, training, and fine-tuning RL models for practical applications.
- **Introduction to Cybersecurity by CISCO** | [Link](#) : Gained the foundational knowledge in Cybersecurity principles and tools such as: Have I been pwned?, OpenStego.