# KRITIKA VERMA

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## **OBJECTIVE**

2nd Year, Bachelor of Technology (IT and Mathematical Innovation Centre), seeking an internship.

# EDUCATION

**Bachelor of Technology, Cluster Innovation Centre (University of Delhi), New Delhi** Expected 2025 1st Year: 8.92 CGPA

Relevant Coursework: Calculus, Linear Algebra, Ordinary Differential Equations, Data Structure and Design, Computer System Architecture, Object Oriented Programming, Partial Differential Equations, Database Management System, Design and Analysis of Algorithms, Integrative Biology, Cell: Biochemical and Molecular perspective, Physics and Discrete Mathematics.

Senior Secondary (12th), St. Gregorios Senior Secondary School, Udaipur (Raj)	2021
Percentage: 95.60	
Matriculation, St. Gregorios Senior Secondary School, Udaipur (Raj)	2019

Percentage: 90.80

Technical Skills	Mathematica, MATLAB, ArcGIS, AutoDock Vena, ${\rm I\!AT}_{\rm E}\!{\rm X},$ Google Collab, MongoDB, and AutoDock Vena.
Languages	Python, MySQL, C, Java, CSS, R, and HTML
MS Office	Word, Excel, Powerpoint, Outlook, Access, OneNote

## EXPERIENCE

#### Intern

Beyond Exams

June 2022 - Nov 2022 New Delhi, India

- Using machine learning to classify YouTube videos into educational and non-educational.
- Further, sub categorizing the educational videos into different streams like music, business, coding, etc,.

#### PROJECTS

**Population Modelling Of Tibetan Antelope By Ordinary Differential Equation**. Predicting the population of Tibetan Antelope Using the already given data using population model with help of Mathematica.

Numerical Analysis of Boundary Value Problem Using the Shooting Method. Numerical analysis of boundary value problems for Linear and Non-Linear ODEs using the shooting method, with the help of the Euler's Method as well as the Runge-Kutta second derivative method are used to solve the problem and later compared on the basis of their efficiency.

**Project Report on Fractals.** Information about various fractals and plotting them using Python, C, and Mathematica.

Animations Using Position Vectors in MATLAB. Animation of different equations in 3D using MATLAB by rendering the equation frame by frame by advancing it with time.

Analyzing Constellations using Graph Theory. Using Python to find the nature of the constellation considering them to be a graph whether that graph is Eulerian and Hamiltonian or not.

Analyzing change in land-use/land-cover of Wayanad and Nilgiri. Using ArcGIS to examine the change in land cover and land use or the years from 2015 to 2022 in the regions of Wayanad and Nilgiri.