

# RITU RAJ SINGH

Student

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📍 Varanasi, India

## EDUCATION

Bachelor and Master of Technology in Mathematics and Computing  
(Honours)

Indian Institute of Technology (BHU), Varanasi

📅 2017 - 2022

CGPA

8.53 / 10

## EXPERIENCE

Semantic Segmentation of 3D Point Clouds

Indian Space Research Organisation(ISRO)

📅 07/2021 - Ongoing

PI: Dr. Tanmoy Som, CO-PI: Ritu Raj Singh, Chhavi Jain

- Implemented an analysing and processing method for raw data.
- Currently, building the segmentation method from processed data and trying to overcome the problems.

Geofence Recommendation

Citrix Internship

📅 05/2021 - 07/2021

Mentor: Katerina Kalou, Nikolaos Anastasopoulos

- Developed and deployed a geofencing recommendation system from the logon session data of users from different product.
- Used the concept of Unsupervised learning to create the recommendation system.

ODE Algorithm Implementation

NUMFOCUS: Sympy

📅 05/2019 - 07/2019

Mentor: Ondřej Čertík, Aaron Meurer

- Developed a module to solve the general type of HYPERGEOMETRIC, BESSELS ordinary differential equations(ODEs)
- Refactor the ordinary differential equation(ODE) module to make it more useful.

## ACHIEVEMENTS

\* Stood 1749 position and 423(In India) position in Google Code Jam round 1.

\* Stood 4998 position in Google Kick Start round B.

\* Current Codeforces rating is 1657

# PROJECTS

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## Retinal Blood Vessels Segmentation

📅 01/2020 - 12/2020

Supervisor: Dr Sunil Kumar, Mathematical Sciences IIT BHU

- Build a machine learning classification model using Locality-constrained Linear Coding with Max-Poling.
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## Diabetic Retinopathy Detection

📅 08/2018 - 12/2018

Supervisor: Dr Sunil Kumar, Mathematical Sciences IIT BHU

- Build a deep learning classification model using attention model similar to Natural Language Processing(NLP) attention model.

# TECH STACK

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## Languages

**Python, C++**

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## Technologies

**NodeJs ReactJs**

**Python Data Science Stack,Hive, PySpark, Azure Databrick**

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