Tuhin Bidyanta

M.sc Tech - Applied Geophysics - IIT, Dhanbad



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EDUCATION

Indian Institute of Technology (ISM), Dhanbad — Msc. Tech, Applied Geophysics

IULY 2024 - MAY 2027 CGPA - 7.76 (till 1st Semester)

Chakdaha College (Kalyani University), Kalyani — Bsc Physics Honours

MAY 2021 - APRIL 2024 CGPA - 8.87

Santipur Municipal High School, Santipur, Nadia — 12th / Board

MAY 2019 - APRIL 2021 89%

JANUARY 2013 - APRIL 2019 91%

PROJECTS

Portfolio Website - HTML, CSS, JavaScript, Flask (<u>link</u>)

September 2024 - December 2024

I created a dynamic portfolio website using Flask, leveraging the power of HTML, Jinja templating, and JavaScript to deliver an engaging and responsive user experience

- Here you can experience fully fledged responsive user-friendly web site
- Here mainly used the concept of DOM manipulation on JavaScript and routing using Flask nothing more than that...

Salt Detecting Model from seismic Section - Python (link)

December 2024

I developed a salt detection model using TensorFlow, leveraging deep learning techniques to identify and segment salt deposits in subsurface imagery accurately

- Here we have some seismic section .tiff file and the salt detected image in .tiff format
- Next I build a sequential layered developed model using TensorFlow
- Here I used Conv2D, dense neurons
- Then trained the image and mask and finally predict the mask image from the seismic section

Object Detection From Gravity Data - Python (<u>link</u>)

January 2025

To play with data I build an interactive model to estimate roughly the depth of and radius of a spherical body from synthetic gravity data using NumPy, matplotlib

- Download Gravity data of a spherical body in csv format then plot it
- Then generate a manual model using matplotlib.widget
- Then fit the data and the best fit estimate the inversion process
- Finally we get the approximate value of the depth and radius

Thesis on report.pdf and code data .py in given link

Tripple Junction Spotting - Python (Pyqmt) (<u>link</u>)

September 2024

To start my work experience with professionals I had joined our beloved professor Giri Yellacheruvu and I am assigned to plot Indian's topography data and find a Tripple junction

- Download .xyz data from Topex website
- Create basemap on pygmt and plot the data
- Then used earth relief data set plot 3m data
- Annotate data and find the triple junction

Chess (web game) - HTML , CSS , JavaScript (<u>link</u>)

JULY 2022

I developed a chess game using HTML, CSS, and JavaScript, offering a fully functional and visually appealing experience for chess enthusiasts

- Use simple responsive user interface
- Mainly build for practicing logical concept on javascript

Face recognition model - Python, yml

October 2024

I developed a face recognition model using Python(OpenCV), leveraging modern machine learning libraries and tools to create a robust and efficient system for identifying and verifying faces

- First open training python file give your name and focus your face
- For 1st few seconds it takes your face data on yml file after showing training complete
- Then run the predict file the it can recognise your face

ACHIEVMENT

- Qualified in state based Scholarship exam NMMSE
- Qualified 1st round of NTSE
- Winner of college level Hackathon based on AI ML
- Qualified all India based JAM exam

SKILLS

- Languages: C++(DSA), Python, HTML, CSS, JavaScript
- MS Office : Excel , PowerPoint , Word
- Technical Skills: Canva, Web Developer (Flask)