



Nikhil Kumar Shrey
Roll No.: 12141160
Bachelor of Technology
Data Science and Artificial Intelligence
Indian Institute Of Technology, Bhilai

+91-9111900797
✉ nikhil.shrey.2003@gmail.com
✉ nikhilkumar@iitbhilai.ac.in
🌐 GitHub Profile
🌐 LinkedIn Profile

EDUCATION

- **Indian Institute of Technology, Bhilai** 2021-present
B.Tech in Data Science and Artificial Intelligence
- **Kendriya Vidyalaya B.M.Y. Bhilai** 2021
Central Board of Secondary Education, 12th standard Percentage: 88 %
- **Kendriya Vidyalaya B.M.Y. Bhilai** 2019
Central Board of Secondary Education, 10th standard Percentage: 92 %

EXPERIENCE

- **Research Intern** June 2024 - July 2024
Indian Institute of Technology, Kharagpur
 - Worked under Assistant Prof. Subhajit Sidhanta on machine learning, focusing on loss functions for class-sensitive learning for long-tailed datasets, and controlling bias and variance..
- **Research Assistant** 2023 - 2024
Indian Institute of Technology, Bhilai
 - Worked under Prof. Subhajit Sidhanta and Prof. Supratik Mukhopadhyay on research related to the bias-variance tradeoff, gaining valuable insights into machine learning and deep learning concepts.
- **Project under Prof. Souryaduti Paul** 2024 - Present
Indian Institute of Technology, Bhilai
 - Developing a blockchain-based voting system project guided by Prof. Souryaduti Paul, focusing on enhancing security and transparency in voting processes.

PERSONAL PROJECTS

- **OnChain Radio - Aptos Blockchain**
Developed an innovative application on the Aptos blockchain for the Inter IIT Tech Meet 2023, hosted in Madras.
 - Tools & technologies used: Move language, Aptos Blockchain
 - Utilized the Move programming language and blockchain technology to revolutionize the music industry.
 - Provided direct radio services and music copyright management between artists and consumers.
 - Ensured artists receive fair compensation and retain control over their work.
 - All transactions and copyright data securely stored on the blockchain using cryptographic techniques.
- **Blockchain-based Lottery System**
Created a decentralized lottery system using Solidity smart contracts.
 - Tools & technologies used: Solidity, Ethereum, JavaScript, Truffle
 - Leveraged the Ethereum blockchain and smart contracts for the lottery system.
 - Managed ticket purchases, stored participant entries, and executed random selection of winners securely.
 - Participants could purchase tickets using cryptocurrency, ensuring decentralization and borderless participation.
 - Emphasized security, transparency, and user interaction through a frontend interface built with JavaScript and Web3.js integration.
- **Novel-Cost-Sensitive Learning Loss Function**
Developed a cost-sensitive learning loss function encapsulated with reinforcement learning.
 - Tools & technologies used: Python, Reinforcement Learning, Machine Learning
 - Aimed to perform better on long-tailed datasets by addressing class imbalance.
 - Implemented advanced reinforcement learning techniques to optimize the loss function dynamically.
 - Currently working on getting a research paper out of this project.

•Ingenuity Website

Developed a modern, responsive website for Ingenuity, demonstrating web development abilities.

– Tools & technologies used: React.js, HTML, CSS, JavaScript

•Blood Bank Management System Web App

Created a web application for location-based searching in a blood bank management system.

– Tools & technologies used: React.js, HTML, CSS, JavaScript, Database

TECHNICAL SKILLS AND INTERESTS

Languages: GoLang, Python, C++, HTML, CSS, React (JavaScript), Solidity, Move

Developer Tools: Google Cloud Platform, Remix IDE, Ethereum Virtual Machine, Truffle Suite, Ganache, Truffle Debugger ,Adobe Illustrator, Figma, Git, Github

Frameworks: TensorFlow, PyTorch, React.js, Matplotlib, PyQt5, Node

Coursework: Blockchain Technology, Artificial Intelligence, Machine Learning, Data Structures, Algorithms, Software Tools and Technologies, Computer Networks

Areas of Interest: Blockchain Development, Web Development, Machine Learning

POSITIONS OF RESPONSIBILITY

•Secretary, BIB - Blockchain Society, IITBH	<i>April 2024-present</i>
•Core member, BIB - Blockchain Society, IITBH	<i>April 2023-April 2024</i>
•Core member, Ingenuity - Competitive Programming Club, IITBH	<i>April 2023-April 2024</i>
•Core member, Renaissance - Art Club, IITBH	<i>April 2023-April 2024</i>

CERTIFICATES AND ACHIEVEMENTS

•Ethereum and Solidity: The Complete Developer's GuideUdemy Course	<i>2023</i>
•10th Place - Inter-IIT Sci-Tech MeetOn-chain Radio Project over Aptos Blockchain	<i>2023</i>