

# Dhruv Tyagi

Portfolio | [GitHub](#) | [LinkedIn](#)

dhruvtyagionly1@gmail.com

+917983061818

## EDUCATION

- **Harcourt Butler Technical University** Dec 2022 – April 2024  
Bachelor of Technology in Electrical Engineering | CGPA: 7.6 Kanpur
- **Rainbow Public School** July 2018 – May 2019  
Senior Secondary (Class XII) | Percentage: **94.6%** Central Board of Secondary Education
  - Ranked **1** in NAO (National Astronomy Olympiad) and qualified for trip to **NASA**.

## WORK EXPERIENCE

- **Invariance Automation** Nov 2022 – Dec 2022  
Software Development Intern IIT Kanpur
  - Working on the Development of **Computer Vision** and **Python** based **User Interface** with the Team Members.
  - It ensures the proper alignment of various components on **PCB** for **automating** the assembly line.
  - Implementing **machine learning models** for matching the product with the prototype.
- **Siemens** June 2022 – Aug 2022  
Research & Development Intern Mumbai
  - **Researched** and developed a work plan for the **Automation** of Lab work at R&D department.
  - Created **API** of labs using the **Mind Connect IOT** module. Prototyped an application on **Mindsphere cloud** using Mendix and designed **PLC program** of **10+** labs on LOGO and **TIA software**.
  - Project Links – [GitHub](#) | [Video1](#) | [Video2](#)

## TECHNICAL PROJECTS

- **Shoe Hype** [GitHub](#) | [Deployed](#) | [Video](#)
  - A **CNN Based Recommender System** where User can Upload any shoe image to get similar shoe **recommendations**.
  - It also helps User get shoe buying options and demonstrates **Reverse Imaging** using **scikit learn** and **RESNET**.
  - **Cleaned and analyzed** the raw Kaggle dataset having more than **20K+** rows.
- **Pose Detection** [GitHub](#) | [Video](#)
  - It detects and analyses **33 pose, 468 face** and **21 hand landmarks** of User using **OpenCV** and **Mediapipe**.
  - It **predicts** the defined poses of the user with probability scores using **Scikit Learn pipelines**.
- **Time Series Prediction** [GitHub](#) | [Deployed](#) | [Video](#)
  - A Stocks **Predictor** made with **Prophet** that fetches data from **API** and graphically represents the result using **Plotly**.
  - User can select from **3000+** stocks and can get predictions ranging from **1 to 5 years**.

## TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, Shell Scripting
- **Data Analytics & Machine Learning:** Hadoop, NumPy, Pandas, Matplotlib, Scikit-Learn, Power BI, TensorFlow, Algorithms
- **Data Science:** Data science pipeline (cleaning, visualization, modeling, interpretation), Time series, Recommendation Engines, Customer Segmentation, Natural Language Processing
- **Tools & Miscellaneous Technologies:** Git, GitHub, AWS, Jupyter Notebook, Streamlit, Excel

## GENERAL SKILLS

- **Languages:** English, Hindi | **Others:** Leadership, Public Speaking, Planning, Delegation, Social Media Management

## HONORS & RESPONSIBILITIES

- **Siemens Scholar** [Website](#)
  - Got selected as a **Siemens Scholar** among the **top 200** candidates from India for the **German dual** based program.
  - Attended **Mechatronics** (Learnt PLC programming) and **soft skills** Training by Growth Center.
- **Co-Secretary | Alumni Association HBTU**
  - Organized **Alumni Meet** with **Mr. President** as chief guest and had **2500+ alumni** at the centennial celebration.
  - Leading the Development of a **Job Portal** that will provide placement and internship opportunities to students.
- **Open Source Maintainer | Hacktoberfest** [GitHub](#) | [Deployed](#)
  - Maintainer of **Tech Talk (Open-Source Tech Topics Learning Website)** at Hacktoberfest 2022.
- **Certification Test** [Certificate 1](#) | [Certificate 2](#)
  - Passed Python HackerRank and **SQL** (Intermediate) HackerRank Certification Test.