UTKARSH MATHUR (Data Scientist)

FORMAL EDUCATION

YEAR	DEGREE / BOARD	INSTITUTE / BOARD	Score
2022	B.Tech. Polymer Science and Engineering	Indian Institute of Technology, Roorkee	6.1/10
2018	Twelfth	Central Board of Secondary Education (CBSE)	87.6%
2016	Tenth	Central Board of Secondary Education (CBSE)	9.6/10

ACADEMIC & PROFESSIONAL COURSES

Academic Courses:

Data Structures and Algorithms in Java (*NPTEL*) | IEE-03 Artififcial Neural Networks | PEN-103 Computer Programming and Numerical Methods | CHN-323 Computer Application in Chemical Engineering

Professional Courses:

Deep Learning Specialisation – *Coursera* | Machine Learning A-Z – *Udemy* | Deep Learning A -Z – *Udemy* | Artificial Intelligence Nanodegree – *Udacity (Ongoing)* | Sports Analytics Using Python – *Mad About Sports* | Data Science using Python - *EICT IIT Roorkee* | Quick Review of Python - *Udemy*

SKILLS

- Object Oriented Programming (**OOP**), Data Structures and Algorithms (**DSA**), Machine Learning (**ML**), Artificial Neural Network (**ANN**), Deep Learning (**DL**), Computer Vision (**CV**), Natural Language Processing (**NLP**), Big Data
- **Python**, **C++**, Java, Perl, **SQL, MATLAB**, PowerBI**,** Tableau
- **NumPy**, **Pandas**, **Matplotlib**, Seaborn, Scikit-Learn, SciPy, **TensorFlow**, **Keras**, PyTorch, PySpark, OpenCV, **PIL** (Python Imaging Library), OpenCV, Git, Material Studio

EXPERIENCE

1. **Data Science Intern** - ImagoAI — April 2021 – May 2021
2. **Research Intern** - IIT ROORKEE — September 2020 – Present
3. **Research Intern** - IIT ROORKEE — June 2019 – July 2019

PROJECTS

Breast Cancer Classification - Course Project (IEE 03 Artificial Neural Networks)

The main objective is to compare these three models - Support Vector Machine (SVM), Neural Network (with Particle Swarm Optimizer), and Neural Network (with Gradient Descent) over Breast Cancer Classification. The conclusion was Support Vector Machine (SVM) models perform a better classification task than Neural Networks models when the number of training examples is small (in our case only 512).

Facial Expression Recognition - Group Project

Collaborated with a colleague over a comparative study of various Machine Learning and Computer Vision models over the FER2013 dataset. I worked on Deep Learning Models to build a Facial Expression Recognizer while my colleague worked over conventional Machine Learning model. The results were a maximum accuracy of 68% from Computer Vision and 65% from Machine Learning Model.

DATASETS PRACTICED

Melbourne Housing Snapshot (Kaggle) | CIFAR-10 | MNSIT – Handwritten digits | Titanic (Kaggle)

POSITIONS OF RESPONSIBILITIES & EXTRA-CURRICULARS

- Manager - **TEDx IITROORKEE** — September 2019 – Present
- Company Coordinator - **Training and Placement Office (TPO), IIT Roorkee** — January 2020 – August 2020
- Volunteer - **Prahari Kaksh**, **NSS (3 UK CTR), IIT Roorkee** — September 2018 – Present

SOFT SKILLS

Time management | Self-management | Team Player | Situational awareness | Leadership qualities | Adaptability | Critical thinking | Criticism-tolerance | Clear communication

| Website: https://007mathur.github.io/ | Email: umathur@ch.iitr.ac.in | Github: https://github.com/007mathur |