UTKARSH MATHUR
(Data Scientist)

I'm a Data Science and Computer Vision enthusiast with experience in Neural Networks and Deep Learning, Programming with Python, C++, JAVA, and Perl, and content writing. I'm pursuing B.Tech. in Polymer Science and Engineering at Indian Institute of Technology, Roorkee. I aim to do Masters in Data Science and go on to make some valuable contributions in the field of Computer Vision and Deep Learning.
I'm a music lover and a big Real Madrid fan. I also like to read about Observational Astronomy, Quantum Physics, Astrophysics, Cosmology.

FORMAL EDUCATION

YEAR	DEGREE / EXAMINATION	INSTITUTE / BOARD	CGPA / Percentage
2019	B.Tech. 2nd Year	Indian Institute of Technology, Roorkee	6.121
2018	Twelfth	Central Board of Secondary Education (CBSE)	89.6%
2016	Tenth	Central Board of Secondary Education (CBSE)	9.6

ACADEMIC & PROFESSIONAL COURSES

Deep Learning Specialisation (Coursera), **Data Structures and Algorithms in Java** (NPTEL), **IEE-03 Artififcial Neural Networks** (IIT Roorkee), **Machine Learning A-Z** (Udemy), **Data Science using Python** (EICT IIT Roorkee)

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**)
- **Python**, **C++**, Java, Perl, **MATLAB**
- **Numpy**, **Pandas**, **Matplotlib**, Seaborn, PIL (Python Imaging Library), **Tensorflow**, **Keras**, PyTorch, OpenCV

EXPERIENCE

Research Intern | IIT ROORKEE | 4 Months (Present)

- Working as a research intern on a **Deep Learning** project under Dr. Mayank Goswami, Department of Physics, IIT Roorkee.

Research Intern | IIT ROORKEE | 1 Month

- Worked as a research intern on a **Material Simulation** project under Dr. Gaurav Manik, Department of Polymer and Process Engineering, IIT Roorkee.
- Scripted an extended library in **Perl** for the Forcite module of Material Studio, that helped in calculating the contact angle and motion of a liquid droplet on an inclined surface coated with super-hydrophobic polymers.

PROJECTS

Facial Expression Recognition | Group Project

- In collaboration with my friend Mohit Sharma, I did a comparative study of various Machine Learning and Computer Vision models over the FER2013 dataset.
- Mohit worked on classical Machine Learning models while I worked on Deep Learning Models to build a Facial Expression Recognizer.

CIFAR -10 | Personal Project

- Built three models to solve the CIFAR-10 dataset, using the concepts of Neural Networks, Convolutional Neural Networks, and Residual Neural Network.
- Accuracies of 43.67%, 67.39%, 69.26% were achieved by Neural Networks, Convolutional Neural Networks, and Residual Neural Network Models respectively.

Digit Recognizer | Personal Project

- Built a Digit Recognizer to recognize handwritten digits, based on the concepts of Convolution Neural Networks.
- The Digit Recognizer was trained on the MNSIT dataset launched in 1988, and it was able to achieve an accuracy of 99.09%.

POSITIONS OF RESPONSIBILITIES & EXTRA-CURRICULARS

- Manager, **TEDx IITROORKEE** (September 2019 – Present)
- Company Coordinator, **Training and Placement Office (TPO), IIT Roorkee** (January 2020 – August 2020)
- Core Team Member, **Cognizance – Technical Festival of IIT Roorkee** (November 2018 – January 2020)
- Volunteer, **NSS (3 UK CTR), IIT Roorkee** (September 2018 – Present)
- Friend of Section (FOS), **Music Section, IIT Roorkee** (August 2018 – September 2018)

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