Madhur Chauhan

Pre-Final Undergraduate
IIT(ISM) Dhanbad,
Jharkhand-826004

+91 8804490505, +91 8866078196
madhurchauhan@yandex.com
http://madhur4127.github.io

EDUCATION

Indian Institute of Technology (Indian School of Mines), Dhanbad
B.Tech in Computer Science and Engineering July 2016-2020 (Expected)
CGPA: 9.76/10.0 (In top 5 amongst 150+ batchmates)

St. Ann's School, Bopal, Ahmedabad (July 2014-July 2016)
Passed higher secondary examination (10+2 CBSE) with Physics, Chemistry and Maths.

D.A.V. International School, Ahmedabad (April 2011-July 2014)
Passed matriculation examination with *perfect* 10.0/10.0 CGPA.

OBJECTIVE

Developing computational models which aims in solving real world problems effectively & efficiently applying skills and knowledge I gained so far.

PROJECTS

Generic Suffix Array Data Structure *(Currently Working)*
String Data Structure Self

Aiming at generic and efficient implementation of suffix array data structure.

Automatic Image Segmentation using Graph Cuts *(Winter 2017)*
Graph Theory and *Unsupervised Learning* Dr. Sushanta Mukhopadhyay

Automatic image segmentation of images with distinguishable background using graph cuts and used unsupervised learning model as Gaussian mixture Model to segment image.

Detection of rotation of Convex object using chain code *(Monsoon 2017)*
Digital Image Processing Dr. Sushanta Mukhopadhyay

Developed an algorithm which uses directional Freeman Chain Code to detect rotation of two input object images, after some preprocessing (normalisation).

Report, Presentation, Results, Source Code avilable at `github.com/madhur4127/project/`

COMPUTER SKILLS

- **Programming languages:** C++14 (4.5/5), C89 (4/5), Python 3.5 (4/5)
- **Tools:** Matlab, Octave, LaTeX, Git
- **Data Science:** Python Libraries: scikit-learn, NumPy, SciPy
- **Platforms:** Windows, Linux (Debain)

SCHOLASTIC ACHIEVEMENTS

- Scored 10 GPA in 1st semester at IIT(ISM) Dhanbad amongst 900+ batchmates.
- Ranked amongst top 0.5% students who cleared JEE (Advanced) 2016 to qualify for seat in prestigious IIT's, achieved rank 4127 in first attempt from general category.
- Cleared JEE(Main) amongst 1.5 million students who appeared in 2016.

EXTRA CURRICULAR ACTVITIES

- **Competitive Programming** : Actively participating in contests hosted by international programming communities from August 2017, I have achieved ratings:- CodeChef - 4 ⋆ (max. rating 1809, div1 participant), Codeforces (max. rating 1486) Project Euler (Solved 50+ problems)

RELEVANT COURSES

A* Discrete mathematics **A*** Object oriented prog. **A** Data Structures
O CS229: Machine learning (Stanford University)
(**A***:exceptional performance, **O**: Online Course)

REFERENCES

Dr. Sushanta Mukhopadhyay (Associate Professor, Dept of CSE at IIT(ISM) Dhanbad)
+91 326-2235422 msushanta2001@yahoo.com