

# HIMANSHU PAL

B.Tech. Metallurgical & Materials Engineering  
UG(IV Year I Semester)  
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Registration No: B.Tech./MT/16118037/2020

Indian Institute of  
Technology  
Roorkee



## Education

Year	Degree/Examination	Institution/Board	CGPA/Percentage
2019	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	7.121
2015	Twelfth	Delhi Public School Azadnagar Kanpur (U.P.) (CBSE)	95.0 %
2013	Tenth	Delhi Public School Azadnagar Kanpur (U.P.) (CBSE)	10.0

## Internships

**Data Science Intern** | Freecharge Payment Technologies Pvt.Limited

8th May - 19th July 2019

- Built & deployed ML Model for recommending best deals to users on the platform using AWS sage maker & lambda
- Extracted data from AWS Redshift and performed Pre-Processing to create a user-item matrix
- Used Factorization Machines to extract latent features from the user-item matrix to build a dense user-item matrix
- Tuned hyperparameters and improved latency by 1.5 seconds

## Projects

**Effects of grain size & wire diameter on the shape memory(SM) & mechanical behavior of SM** | IIT Roorkee

1st Dec 2017 - 15th Jan 2018

- Studied stress induced martensitic transformation in Ni-Ti alloy using analytical tools in MS excel
- Collected several data pertaining to different classes of shape memory alloys (SMA) from the literature
- Correlated the combined effects of grain size and wire diameter to the onset of stress-induced martensitic transformation

**Effect of plastic deformation on diffraction during recrystallization & melting using synchrotron** | IIT Roorkee

15th May 2018- 30th June 2018

- Studied melting and recrystallization phenomenon in different materials using Origin (data analysis software)
- Analyzed the effect of Prior deformation on static recovery, recrystallization and melting during a fast heating process in the specimen and how it affects the properties of material thus formed
- Performed curve-fitting, chi-square test and other statistical analysis for hypothesis testing
- Found proof of secondary melting and recrystallization during a fast heating process

## Awards / Scholarships / Academic Achievements

- Cleared level I in flipkart Data Science competition, 2019
- Won Gold Medal in Volleyball, JCI Sportathon, 2013
- Secured International Ranking-33 in International G.K. Olympiad in 2012

## Skills

Computer languages	C++, Python, SQL
Software Packages	Arduino, Anaconda, AWS Sage maker, AWS Lambda, AWS Redshift, Matlab, MS Office, Matplotlib, Numpy, Origin, Pandas, Scikit-learn, SQL bench
Additional Courses Taken	Advanced Engineering Mathematics, Numerical Methods, Probability and Statistics, edX CS50, Coursera Machine Learning, Banking and Bank Finance(IBM-302)
Languages Known	English (SRW) , Hindi (SRW)

## Positions of Responsibility & Extra Curriculars

**Chairperson | Corporate Interaction Group, IIT Roorkee**

2016-Present

- Leading a 4 tier team comprised of 25+ core team members
- Organized 50+ events including guest lectures, workshops, and seminars
- Assisted in Srishti 2019 as Vice Chairperson of CIG in bringing Business and Industry magnate
- Introduced corporate-academia interaction in Srishti 2019 & invited 10+ corporates like Maruti, BHEL, Godrej etc.

**Convener | Rethink Tinkering Lab, IIT Roorkee**

2017-Present

- Organized Workshop on Commercial & Open Source 3D Printing by Dr. N Patel, Program Manager(Cambridge University)
- Assisted in Ethiopian delegates visit in Rethink! The Tinkering Lab
- Formulated policies of the lab which includes use of equipment, workstations, workspace etc
- Conceptualized the structure of students' team, build the 10 members team and also wrote a constitution of the lab

## References

### Harsh Jain

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### Dr. K.S. Suresh

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