

# Rajat Mittal

+91-8426878666 | [rajatmittal2012@gmail.com](mailto:rajatmittal2012@gmail.com) | [linkedin.com/in/rajatenzyme](https://www.linkedin.com/in/rajatenzyme) | [github.com/rajatenzyme](https://github.com/rajatenzyme)

## EDUCATION

---

<b>Indian Institute of Technology, Jammu</b> <i>Master of Technology in Computer Technology — CGPA-9.44/10</i>	Jammu Sep. 2020 – Present
<b>JK Institute of Applied Physics &amp; Technology, University of Allahabad</b> <i>Bachelor of Technology in Computer Science &amp; Engineering — 74.47%</i>	Allahabad Aug. 2016 – Sep 2020
<b>Bhartiya Sr Sec School</b> <i>Class XII — 94.60%, PCM-100%</i>	Sikar 2015
<b>Bhartiya Sr Sec School</b> <i>Class X — 92.50%</i>	Sikar 2013

## TECHNICAL SKILLS

---

**Languages:** C, C++ , Python

**Libraries:** NumPy, Pandas, Matplotlib, Seaborn

**Softwares.:** Git, MySQL

**Platforms:** Linux, Windows

**Miscellaneous:** Data Structures and Algorithms, Object-Oriented Programming, Machine Learning, Competitive Programming

## EXPERIENCE

---

<b>Research Assistant</b> <i>IIT JAMMU</i>	Sep 2020 – Present <i>Full-Time, Jammu, IN</i>
<ul style="list-style-type: none"><li>Working in Central Computing and Communication Infrastructure (C3I), IIT Jammu.</li><li>Managing High-Performance Computing System at Agastya- IIT Jammu</li><li>Assisting faculties and students in using HPC and Cloud Services efficiently.</li></ul>	

## PROJECTS

---

<b>Mocking Bot</b>   <i>Sklearn, NumPy, Pandas, Wave, Struct</i>	E-Yantra, IIT Bombay
<ul style="list-style-type: none"><li>Developed a prediction tool of Notes and Instrument in a given Audio file in a team of four members.</li><li>Used SVM classifier to detect the instrument being played in an audio file, along with all the notes and frequencies present in the audio file.</li><li>Extended it to make a robotic system that would mimic the audio, based on the results given by the classifier.</li><li>reached in the pre-final round after clearing five competitive stages.</li></ul>	
<b>Weather Forecasting System</b>   <i>Python, Numpy, Pandas, Sklearn, IoT</i>	Asst. Prof. BN Subudhi IIT JAMMU
<ul style="list-style-type: none"><li>Deployed IoT Sensors for Temperature &amp; Humidity, Soil Moisture, Air Quality Index and Deflection with the main Gateway node.</li><li>Collected real-time data through sensors over a cloud using a small private network maintained in the gateway.</li><li>Forecasted weather (Temperature, Humidity) for the IIT Jammu campus using Machine Learning techniques.</li><li>Predicted landslides in the hilly areas using soil moisture and deflection sensor by setting some threshold value of deflection in particular axis and observing previous data of soil.</li></ul>	

## **Data Organization and Information Retrieval System** | *Python, NLP*      Prof. Virendra Singh, IIT Bombay

- Performed text preprocessing on web data over a corpus of 2000+ documents.
- Preprocessed documents by removing stop words, tokenizing and all to get the processed document for further indexing.
- Created a dictionary (key-value pair) consisting of DocID as key and the frequency of that word as the value in that document.
- Created inverted index where implemented Boolean queries and Phrase queries to get the required documents.

## **Student Login Alert** | *ThingSpeak, MATLAB*      Asst. Prof. Ankit Dubey, IIT Jammu

- Predict hand-written digits via scanning from a MATLAB android app using camera, record them, and send them over to the ThingSpeak cloud platform.
- After sending the id to the cloud, it will map to the particular id of a student and send a detailed email to the host about the timestamp of joining by a student.

## SCHOLASTIC ACHIEVEMENTS

---

- Topper of M.Tech. Computer Technology at IIT Jammu for consecutive two semesters.
- 100% PCM Marks in 12<sup>th</sup> Standard Examinations. Also secured 1<sup>st</sup> Rank in the whole Rajasthan in PCM subjects.
- 15<sup>th</sup> District Merit in Rajasthan State Board in 10<sup>th</sup> Standard.
- Received an HP laptop for exceptional performance in 10<sup>th</sup> Standard under Rajeev Gandhi Vidyarthi Digital Yojana.

## EXTRACURRICULAR & ACHIEVEMENTS

---

- Qualified Google Code Jam 2020 Qualification round 2020.
- Participated in SnackDown 2019 and reached to Pre-elimination round.
- 3 \* active coder on CodeChef.
- Active user on HackerEarth (solved around 300+ problems)

## POSITIONS OF RESPONSIBILITIES

---

### **Coding Club - CODICIAN** | *JKIAPT, Allahabad*

- Core member of Coding Club – Codician at JK Institute, University of Allahabad.
- Hosted various coding contests on HackerEarth for junior students of the college.

### **Avirbhav'19 Captain** | *JKIAPT, Allahabad*

- Captain of team *Lannisters* at Annual Fest *Avirbhav* of JK Institute.
- Managed several events of the fest in different fields like technical, sports, cultural etc. in a team of 30+ students in the fest