

# Aditya Kumar Singh

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## EXPERIENCE

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**Tata Metaliks, Kharagpur**  
**Graduate Engineer Trainee**

**06/2023 - 07/2023**  
**Kharagpur, WB**

*Digitalization of Compliance Mechanism of Safety/Standard Operating Procedures and checklist formulation*

- The project involved discovering possible methods to automate the existing Paper- based SOP Management techniques of various maintenance & replacement operations being carried out in the industry daily.
- Developed custom Computer Vision based techniques to track and checklist the processes in a sequential manner using a pipeline of implemented using a curated list of 8 algorithms to track various processes.
- Managed a process re-engineering project to improve and consolidate end-to-end service processes; restructured communication flow among two primary departments and cut down paperwork by 75%.

**Indian Institute of Management, Ranchi**  
**NLP Research Intern**

**07/2022 - 01/2023**  
**Ranchi, JH**

*Unsupervised & Categorical Segmentation of Customer Product Reviews*

- Presented my work at the International Conference on Data Analytics for Business and Industry (ICDABI), 2022, Bahrain and published it in February 2023 at IEEE Xplore.
- Spearheaded the creation of a custom coefficient algorithm for simultaneous ranking and segregation of customer product reviews, optimizing departmental workflows and reducing resolution time by 50% for a product-based company.
- Used state-of-the-art Clustering and Sentiment Analysis algorithms like Fuzzy C-means Clustering and VADER Sentiment Analysis techniques respectively.

**National Institute of Technology, Durgapur**  
**Additive Manufacturing Research - AI/ML**

**01/2022 - 06/2022**  
**Durgapur, WB**

*Optimum parameter study of FDM 3D Printing processes*

- Conducted a thorough parametric study of the Fused Deposition Modeling 3D Printing Process parameters.
- Worked on state-of-the-art Gradient Boosting regression techniques for back- propagating the predicted labels thus calculating the optimum process parameters getting a tuned F1 – Score of 92%.

## EDUCATION

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**National Institute of Technology, Durgapur**  
**B. Tech – Mechanical Engineering**

**May 2024**  
**GPA – 9.13 / 10**

- **Awards:** Winner of Techmela 2023, Scale Up 2021, Ranked 30<sup>th</sup> in Escalade 11.0 2022, IIT Guwahati
- **Leadership:** Centre of Cognitive Activities (Head of Innovation), AileronX (Founder & President), Aarohan 2023 (Senior Fest Coordinator)

## OTHER

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- **Technical Skills:** Deep Learning, CAD/CAE, MATLAB, SQL Server, PostgreSQL, Power BI, Tableau, Microcontroller Programming
- **Certification & Training:** LinkedIn Certified Machine Learning Expert, Machine/Deep Learning A – Z
- **Languages:** Hindi (native), English (fluent), Bengali (fluent), German (A2 Level).