ABHISHEK ANAND | 16CY20004

CHEMISTRY (M.Sc. 5Y)

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2021	M.SC(5YR)	IIT Kharagpur	7.60 / 10
2016	Senior School Certificate Exam.(AISSCE)	Central Board Of Secondary Education	92%
2013	All India Secondary School Exam.(AISSE)	Central Board of Secondary Education	10 / 10

INTERNSHIPS

DATA ANALYST | SAPIO ANALYTICS PVT. LTD. [Apr-May'20]
Worked on Health Care dataset to classify and predict the appearance time of malignant cancerous cells
- Analysed large data for **binary classification** of malignant cells and predicting the appearance time for malignant cells
- Visualized the **correlation** between the features using **heat maps** to omit the features having similarity index above 0.8.
- Reduced the features and devised **Ensemble Modelling** to enhance overall performance by minimizing the **noise**, **bias** and **variance.**
- Minimized the **type-2 error (False-Negative)** and improved the classification accuracy to **94%**with **F1-score** of **0.93**

PROJECTS

ALGORITHMS FOR TEXT ANALYSIS| COURSE PROJECT [May-June'18]
Guide: Prof. Pawan Goyal , Department of Computer Science and Engineering , IIT Kharagpur
- Made a **spelling** and **grammar correction** programs using the **edit distance** algorithm for word correction in sentences
- Devised a **Probabilistic Language Model** biased towards the givenpre-trained data to predict the upcoming word

NANOMATERIALS AND NANOCLUSTERS| MSc. PROJECT [Jan-Mar'20]
Project: Unlocking the Synthesis, Characterisations and Applications of different Nanomaterials
- Surveyed Literatures for **constructing synthetic schemes** for characterisations and applications of Nanoclusters(NCs).
- Prepared Performance report and presentation slides of the work performed and presented in Lab. &Department.

COMPETITION/CONFERENCE

INTER-HALL DATA ANALYTICS | IIT KHARAGPUR [March 2020]
- **Forecasted electricity consumption** meter readings of upcoming 4 months by using of past years' data.
- Applied **ARIMA model** after first order differencing where p and q were found using **ACF** and **PACF curves.**
- Converted to regression problem by creating new features and applied **Ridge** and **XGBoost** regression models
- Results were compared for all validation sets multiple times and the best model was used for forecasting.

SKILLS AND EXPERTISE

- **Programming Languages:**C |C++ | Python
- **Platforms and Softwares:**Windows | LINUX |MS-Excel | MS Powerpoint | SOLID WORKS | AUTOCAD

AWARDS AND ACHIEVEMENTS

- Secured a SGPA of **9.25** in semester 9 enrolled in 5Y Integrated MSc. Course in the Department of Chemistry.
- Secured a rank of **8205(top 8%) in** JEE-Advance 2016 among **1.1million** students appearing for JEE-Mains 2016.
- Awarded **Certificate of Merit** by Children's Edu. Trust for Excellent Performance in All India Talent Search Exam.

COURSEWORK INFORMATION

- Programming and Data Structures
- Probability and Statistics
- Partial Differential Equations
- Integral Calculus
- Differential Calculus
- Deep Learning
- Machine Learning
- Engineering Drawing
- Computer Aided-Design
- Computer Graphics
- Computational Chemistry
- Quantum Chemistry
- Molecular Thermodynamics
- Molecular Spectroscopy
- Solid State Chemistry
- Group theory for Chemists

POSITIONS OF RESPONSIBILITY

Mentor
- Mentored **4 students** of **2nd year** IIT Kharagpur in Academics, life skills, Time Management in a Voluntary Student Group.
- Conducted Open **Doubt Clearing Sessions** in Chemistry and Basic EC for first year students of IIT Kharagpur.

Event Coordinator| Humanitarian
- **Managed Accounts team** and team for Cultural programmes in the **2nd Largest Rath Yatra on** the globe for **3 years.**
- **Organised Debates**, GDs, Dramas among **110 students** coming from **15 institutes** including **2IITs** and **7NITs.**
- **Conducted Seminars** for 1st year Btech and Mtech Students on '**THE ART OF SELF-MANAGEMENT'** based on **Gita.**

EXTRA CURRICULAR ACTIVITIES

- An active member of **V.O.I.C.E.** which aims at the **Character building**and **Personality development.**
- Has been an active member of National Service Scheme **(NSS) for 2 years[2016-'18]**at IIT Kharagpur.
- **Social Services:**- Set up free **eye check-up Camp** and Physician consultation in Ayma village nearby IIT KGP.
- **Disaster Management Workshop:-** Learned to develop rescue techniques and first aid methods for emergency situation.