Siddham Jain
Chemistry
Indian Institute of Technology Bombay
Specialization: Chemistry

16B030011
4 year B.S.
Male
DOB: 18/07/1997

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	7.80

Minor degree in **Entrepreneurship** from Desai Sethi Centre for Entrepreneurship, IIT Bombay

PROFESSIONAL EXPERIENCE

HDFC Bank, Mumbai | *Risk Analytics Unit*   [May '19 - Jul '19]
Awarded a Pre-Placement Offer for exemplary performance during the internship
- Developed a **Risk Model** to find different **clusters** and calculated their probability of being involved in **fraudulent** activities
  - Mapped **60M+** bank transactions (NEFT, IMPS) as **Graph Database** with customers as nodes and transactions as edges
  - Devised an algorithm to find all **directed cycles** of transactions from this database; improved the running time by **~90%**
- Built the architecture of models trained on SVM, Random Forest, Boosted Trees, kmeans & Linear Regression using **TensorFlow**
- Analyzed the **sentiment** of Management Discussion and Analysis in Annual Reports using **NLP techniques**

Capital Float, Bangalore | *Decision Sciences Team*   [May '18 - Jun '18]
Awarded a Pre-Placement Offer for exemplary performance during the internship
- Performed **features extraction** from shop images to have alternate data to assess risk in underwriting the low-risk customers
- Implemented **Convolutional Neural Network (CNN)** Model to classify shop images into **8** different **business categories**
  - Trained the model using **Transfer Learning** on 8000+ images and validated on **2000+** images; achieved the accuracy of **~68%**
  - Extracted **linguistic features** from shop images using **Google Vision and Amazon Rekognition** APIs to gather more data
  - Improved the overall accuracy of the CNN Model to **~80%** by ensembling a model trained on linguistic features
- Developed a model to extract the information from **PAN** and **Aadhar Card** and used that in **auto tagging** the documents

KEY PROJECTS

Toxic Comments Classification | *Data Analytics in Operation Research*   [Jan '19 - May '19]
- Implemented various **sequential models** to classify twitter comments as toxic or non-toxic
- Developed models trained on **RNN, LSTM, GRU and Bidirectional RNN** to compare their accuracies
- Developed a model based on **BERT** and fine-tuned it classify the comments

Toilet Ads | *Guide: Prof. Devdip Purkayastha* | *Entrepreneurship Course Project*   [Jan '19 - May '19]
- Incorporated the idea of **smart advertisement** in public toilets through interactive medium of high-tech **video game playing**
- Ideated innovative **market entry strategies** after conducting extensive **market research** to understand this business case
- Tested the effect of advertisement in toilets in sales of a local salon shop resulting in a **25% increment** of customers

Bicycle Leasing Service | *Guide: Prof. Raj Jaswa* | *Entrepreneurship Course Project*   [Jul '17 - Dec '17]
- Conceptualized the original **start up idea** of an inexpensive **bicycle service** solving the problem of pollution and lazy lifestyle
- Developed a **Business Model Canvas** after extensive research on value proposition, customer discovery and cost structure
- Prototyped the design of bicycles with a built-in **smart lock system** enabled via IIT Bombay ID card for efficient service

TECHNICAL PROFICIENCY

<u>Relevant Courses:</u>   Machine Learning, Deep Learning, NLP, Managerial Economics
<u>Data Science Tools/Libraries:</u> TensorFlow, Keras, PyTorch, Theano, nltk, NumPy, Pandas, Scikit-Learn, Networkx
<u>Programming and Software:</u>   C/C++, Python, R, MySQL, AWS, Neo4j, SolidWorks, AutoCAD, Adobe Photoshop

EXTRACURRICULARS

SCHOLASTIC	• Offered scholarship for Higher Education (top 1%) under **INSPIRE** program of the Government of India	['16]
	• Participated in **National Science (VIJYOSHI) Camp** organised under Kishore Vaigyanik Protsahan Yojna	['16]
	• Secured **99.83** and **97.69** percentile in JEE Main and Advanced, among 1.5M & 0.2M candidates	['16]
	• Certified for completing **Quantitative** & **Algorithmic Trading** bootcamp by former director, Deutsche Bank	['18]
	• Completed a 5-week Basic **Spanish** course offered by Prof. Deepa Sheth at IIT Bombay	['18]
TECHNICAL	• Trained **VGG-16**, **ResNet-50**, **Inception-v3**, **AlexNet** on ImageNet dataset to analyse their performance	['18]
	• Implemented **RNN** model for **Time Series** prediction of opening stock price of Apple using 7 features	['19]
	• Built a simple Maths game using HTML, CSS, javaScript	['20]
SPORTS	• Successfully completed a 15-day **Mountaineering Adventure Course** conducted by JIMWS, Pahalgam	['17]
	• Secured **1st** position in Cricket **General Championship**; participated in Advanced Cricket Summer Camp	['18,'16]