

# JAY NARESH DHANWANT

## ACADEMIC PROFILE

Degree/Certificate	Institution	Percentage/CGPA	Year
IDD	Chemistry IIT (BHU), Varanasi	8.48	2022
Maharashtra State Board (XII)	Hislop, Nagpur	82.77	2017
CBSE (X)	Bharti Krishna Vidhya Vihar, Nagpur	91.20	2015

## SKILLS

- **Areas of Interest** : Data Science, Analytics, Strategy, Development.
- **Languages** : Python, C, C++, SQL, javascript, MATLAB
- **Tools /Frameworks** : Cloud Computing, Data/ ML-based python libraries, ml5.js, Tensorflow/ tensorflow.js, Pytorch, dask, pymysql, Microsoft Excel, XLwings, Tableau, algorithmic programming

## INTERNSHIP/TRAINING

### Data Scientist Internship | Flatfolder Ltd. Finland

May'20 - July'20

Developed **3 major analytics services** for flatfolder platformed and engaged with web developers to bring it into production.

- Managed MySQL database with **0.5 Million** data points across multiple tables effectively using **dask**
- Executed extensive pre-processing on scrapped data including **descriptive texts**.
- Developed pipeline to **automate model selection** and training for **3 problem statements** (i) Cluster similar apartments (ii) Predict rental and selling cost (**r<sub>2</sub>: 0.96**) (iii) Recommend renovations and ROI
- Created dashboards to deliver insights to clients and domain experts and **improvised on the feedbacks**
- Made corpus of renovation texts that decreased translation costs from **3750\$ to 170\$**

**Exposure:** Statistical Analytics, here-API, SQL, AWS, Machine Learning, Tableau, algorithmic programming: <https://flatfolder.com>

### Machine Learning Practitioner | Mediport

1st-30th April 2020

- Built and deployed API endpoints that return the pathology report parameters from an image using **AWS Beanstalk**
  - Collaborated with **PhenoMx Inc. a USA** based digital health company to create risk factor analytics of COVID 19 based on comorbidities and blood parameters.
- Exposure** python, Flask, Computer Vision, OCR, AWS Beanstalk, Statistical Analysis

## PROJECTS

### Antibiotic prediction using Spectroscopy and Deep Learning

Sem V - VI

*UG Project under the supervision of Dr. V. Ramanathan*

- Gathered spectral data from lab. and previous studies. 30 stains were grouped into 7 treatment class
- Observed data size-independent accuracy of **91% & 88.9%** in Logistic Regression and Random Forest
- Modeled customized **1D - filter -ResNet**. ResNet with **99.1%** accuracy trained over 60,000 spectra addresses high SNR and subtle peaks, performed better than ANNs

### Forecasting COVID 19 growth in India with customized SIR Model

Sem VI

*Under the supervision of Dr. V. Ramanathan*

- SIR model is an epidemic model where the differential equation parameters are pre-assumed
- Optimized a custom loss function to estimate these parameters with data. Written a **public reviewed paper** to comprehensively analyze the results: <https://arxiv.org/abs/2004.00696>

## Significant Short Term Projects

Client Relation	<b>Client: Mr. Benny Asnake   IT Data Consulting LLC.   Reston USA</b> <a href="https://lor-jay.s3.amazonaws.com/ITDC_Jay_Recommendation.pdf">https://lor-jay.s3.amazonaws.com/ITDC_Jay_Recommendation.pdf</a> Written a clustering algorithm for CRM data that retrieves the data from the oracle database recognize, and labels typographical errors together, clusters data, and creates visualizations.
	<b>Client: Mr. Pieter Cawood   University of the Witwatersrand   South Africa</b> Implemented my paper on SIR model parameter tuning, did a comprehensive analysis between LSTM and 1D CNN in COVID 19 forecasting for Mr. Cawood's research work.

## EXTRA-CURRICULAR ACTIVITIES

Presentation	<b>Educator at Unacademy</b> <i>March 2018 - May 2018</i> Made online video lectures on 1st-year curriculum with <b>10,000+</b> views and built a community of <b>690+</b> dedicated followers
--------------	--

**T:** 9834123803 **E:** jaynaresh.dhanwant@gmail **Address:** Plot no. 57, popular society, near amravati road, wadi naka no. 10 Nagpur, Maharashtra