

# Jay Naresh Dhanwant

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<https://github.com/Jay-523/>

## Objective

In anticipation of the opportunity to get associated with an organization of repute, that enhances my technical as well as analytical skills and provides me a platform for mutual growth.

## Education

### India Institute of Technology (BHU) Varanasi

Integrated Dual Degree (BTech + MTech): 2017-22

Industrial Chemistry: CPI – 8.46

### Hislop College, Nagpur

Maharashtra State Board (Class XII): 2016-17  
82.9%

### Bharti Krishna Vidya Vihar, Nagpur

C.B.S. E (Class X): 2014-15  
CGPA – 9.6/10

## Skills and Interest

### Languages:

C, C++, Python, MATLAB

**Development:** HTML5, CSS3 (Basic), JavaScript

### Tools / Frameworks:

Cloud Computing (AWS/GCP), Microsoft Excel.  
Python – Relevant Machine Learning Libraries  
Framework – TensorFlow, Pytorch(basic), tflite, tensorflow.js

OS: Windows/ Linux/ Amazon Linux

### Area of Interest:

Data Science, Machine learning, Computer Vision, Natural Language Processing, Analytics

## Achievements

- National Finalist of Data Science Hackathon conducted by ABinBev (top 20 in 5000+ participants)
- Raised 8000+ views on my lessons and became a part of educator program in Unacademy
- Research paper on machine learning model for corona virus received 3 magazine appearances

## Position of responsibilities

### Event Manager:

Sep '19-Feb '20

Requeza – A Business Event IIT (BHU) Varanasi

- Lead a team of 8 students for conducting the event.
- Selected problem Statement from Harvard Business Review and discussed the solutions with judges
- Raised a participation of 1000+ candidate, a 60% increase in participation since last year

### Student Alumni Interaction Cell: Sep '18- Dec '19

Maintained the database of Alumni and interacted with them on the behalf of institute

### Student's Parliament:

Was elected as a member of Hostel Executive Committee

## Significant Projects and Internships

### Data Scientist Internship

March'20 – May'20

Flatfolder: Finland, Europe

- Developed 3 major AI – Analytics services for the real-estate market
- Made an AI driven portal that would give insights to the b2c market on the spike in apartment prices, feasibility and requirements of renovations, and predictions of real estate prices using algorithms such as Random Forest, K-means and Artificial Neural Networks
- Developed pipeline to clean and manage data involving 40 Million instances of properties
- Automated model selection and training for 3 problem statements (i) cluster similar apartments (ii) Predict Rental and selling cost ( $r_2 = 0.96$ ) (iii) Recommendation for renovation using cost and ROI
- Worked with data and backend engineer for integrating the models in the portal

### Data Scientist Doubt Buddy

Nov'20 – May'21

Gurgaon, India

- Created an end-to-end OCR product that takes input image, converts into latex text and scans the data base using word2Vec embedding.
- Created question recommendation system for students.
- Made paraphrasing tool using Google Pegasus
- [www.doubtbuddy.com](http://www.doubtbuddy.com)

### Thesis Project (IV – V Semester)

July '19 –Feb'20

#### Identifying lethal pathogens using Convolutional Neural Networks on Raman Spectra

- Awarded honours degree in computational chemistry on the basis of this project
- Developed a deep learning architecture inspired from ResNet from scratch in tensorflow involving 25 – 1 Dimensional CNN Layers. Used strided convolution instead of pooling layers that avoided data loss in spectral peaks
- Model was trained on over image 100,000 samples for identifying lethal pathogens with an accuracy of 99.1%

### Research Project: Machine Learning Modelling

Feb20 – May '20

#### Under the supervision of Dr. V. Ramanathan

#### Developing Machine Learning Algorithm for SIR model COVID 19

- Research Paper is available published under public review in Cornell University arxiv, and in MedRxiv under epidemic modelling section
- Written a machine learning algorithm using epidemic modelling, SciPy was used for scientific calculations, and the entire code was written in python which learns the social contact structures, useful for predictions and evaluation of measures taken by the nation.
- **Embedded the python model in MS Excel** for usability among varied people using xlwings for python
- Research was covered by **Organizer Weekly Magazine**

## Independent Consulting projects

### 1. Benny Asnake – IT Data Consulting – Reston USA

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.

### 2. Mr. Pieter Cawood | University of the Witwatersrand | South Africa

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.

### 3. Abhinav Bansal – Agra, India

Developed algorithms for game simulations and deployed it as an API on AWS ec2 using flask

### 4. Mediport.in – Varanasi, India

Developed digitization pipeline for invoices and integrated it with AWS RDS to automate invoice processing.

All the resume proofs are available <https://github.com/Jay-523/Resume->