

# Yogita Patel

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Yogita-Linkedin  
Yogita-Github

## EXPERIENCE

### • Homi Bhabha Centre for Science Education

2019 – 2021

*Project Scientific Assistant*

Mumbai, India

- Part of Olympiad Question Development team for Indian Physics Olympiad (IPHO)
- Manage IPHO and NIUS (National Initiative on Undergraduate Sciences) programmes conducted every year
- Worked on several projects on Physics experiments which involved extensive model designing and analysis. Got two paper published in Physics Journal.

### • UT

2018 – 2019

*Teacher cum Content Developer*

Mumbai, India

- Taught Physics and lead team in content development of SAT.

### • Podar Innovation Centre

2016 – 2017

*Curriculum Developer*

Mumbai, India

- As a School Review team member, surveyed Podar Schools across India periodically to assess the progress in teaching learning process and the overall functioning of the school.
- Focused on Multiple Intelligence and Bloom's taxonomy-based teaching learning process.
- Managed animation as well as content team to create K12 e-learning course materials for science subject.
- Prepared and moderated lesson plans, question papers of Physics and Science Olympiad papers (CBSE ICSE).

### • Avalon Heights International School, Vashi

2015 – 2016

*Teacher*

Mumbai, India

- Taught Math and Physics to middle school students.
- Focused on activity-based teaching aligned with Multiple Intelligence.

### • Edtech Start-up

2012 – 2014

*Manager*

Mumbai, India

- Website development WordPress
- Content development K-12

## EDUCATION

Degree/Certificate	Institute/Board	CGPA/Class	Year
PGP (AI&DS)	Jio Institute	9.00	2022-Present
B.Sc (Physics)	Mumbai University	First Class	2011-2012
HSC	Maharashtra Board	Distinction	2008-2009
SSC	Maharashtra Board	Distinction	2006-2007

## ACADEMIC PROJECTS

### • Capstone project

*Machine Learning and Optimization*

- Optimising carbon footprint of an integrated Power generation system.

### • Natural Language Processing

*Skills- BeautifulSoup, NLTK, Spacy, Parsing*

- Various information extraction from the tweets data of Golden Globe Awards
- Interactive chatbot for cooking a recipe.

### • Machine Learning and Deep Learning

*Skills - EDA, supervised learning, statistical modelling, handling imbalanced data, Pytorch*

- Prediction of Sepsis disease prior 6 hours using ML model
- Prediction of churning of a customer churn using Telecom Data
- Prediction of the emotion, celebrity similarity, age and gender.

## PUBLICATIONS

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- **Gravitational Acceleration**

*Sep, 2022*

<https://aapt.scitation.org/doi/10.1119/10.0013857>

- Published paper on ‘Analyzing a Free-Falling Magnet to Measure Gravitational Acceleration Using a Smartphone’s Magnetometer’ with Dr. Praveen Pathak (HBCSE)

- **Doppler Effect**

*Sep - 2020*

<https://iopscience.iop.org/article/10.1088/1361-6552/abadd7/meta>

- Published paper on ‘Determination of the friction coefficient of an inclined plane using the Doppler effect and smartphones’ with Dr. Praveen Pathak (HBCSE) in Physics Education journal

## TECHNICAL SKILLS

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- **Programming Languages:** Python, SQL
- **Developer Tools:** Visual Studio Code, Git
- **Data Analytics:** Tableau, D3
- **Big Data:** Cloud databases - Spark, Snowflakes
- **APIs:** Numpy, Pandas, NLTK, Scipy, Matplotlib, scikit-learn

## SOFT SKILLS

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- **Management:** communication, time management and listening skills
- **Problem Solving:** solution oriented, optimistic and self-driven

## HOBBIES

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- **Singing and Dancing:** I participated in various events at college level.