

# Vishwa Shah

☎ (+91) 83692 70547 | ✉ vishwayvs@gmail.com | 📄 vishwa27yvs | 🌐 vishwa-shah-240055171

## Education

### BITS Pilani, K K Birla Goa Campus

BACHELOR OF ENGINEERING IN COMPUTER SCIENCE, **CGPA: 9.05/10**

Goa, India

Aug 2018 - expected May 2022

### Pace Junior Science College, Borivali, Mumbai

CLASS 12TH: 94.77 %

Maharashtra, India

March 2017 - April 2018

### Pawar Public School, Mumbai

CLASS 10TH: 95.50 %

Maharashtra, India

April 2015 - April 2016

## Work Experience

### Microsoft India (R&D)

(Remote)

SOFTWARE ENGINEER INTERN

May 2020 - July 2020

- Worked on the project **Carbon Dashboard** which provides granular insights and analysis of carbon emissions across buildings.
- Developed a **Time Series Model using Machine Learning** to predict the attendance of people, to allow better planning, reducing the wastage of resources and carbon emission.
- Used features like **trend, seasonality** and **correlation** for tuning the model and interfaced the result and metrics on PowerBI dashboard. Tech stack used: PySpark, **Python, SQL, Databricks, PowerBI** and **Azure services**.
- The project achieved **2nd place globally** in the domain **Hack for Sustainability** at the **Microsoft Global Hackathon 2020**.

## Projects

### Machine Learning Algorithms for Structural Health Monitoring

SUPERVISOR: DR. KOTA SOLOMON RAJU & DR. GAURAV PUROHIT, CSIR-CEERI, PILANI | [GITHUB LINK](#)

May 2020- Jun 2020

- Built **deep learning models** for Monitoring the Health of Building Structures which allows keeping track of structural damage using features like interstory drift ratio and data from accelerometer signals.
- Used **CNNs** on simulated accelerometer data for classifying **structural state** based on damage with an accuracy of 85.11%.
- This can help address vulnerable structures and prevent the loss of life and property after a **natural disaster**.

### Modelling The Cognitive Functions of Consumer Behaviour

SUPERVISOR: PROF. BHARAT DESHPANDE, BITS PILANI, K K BIRLA GOA CAMPUS | [GITHUB LINK](#)

Jan 2020 - Jun 2020

- This project aims to predict **consumer behaviour** using brain wave measurement technology and machine learning.
- Processed the collected brain data-**EEG** signals using **MATLAB** EEGlab toolkit.
- Developed a **Machine Learning Model** in **Python** to predict consumer behaviour using classification algorithms like K- Nearest Neighbors and Random Forest on the processed EEG data.

### Markov Chain Model For Natural Language

[GITHUB LINK](#)

June 2019

- Used a Markov Chain to create **probability distribution** of each successive letter depending on the preceding letters for a piece of English text.
- Simulated Markov chain to generate pseudo-random text in **Java** from this probabilistic distribution.

## Teaching Experience

### Discrete Structures for Computer Science, CSF222

TEACHING ASSISTANT, BITS PILANI, K K BIRLA GOA CAMPUS

Sep 2020-Ongoing

- Assisting with developing solution set for assignments and supervision during evaluative components

### Introduction to Computer Programming, CSF111

TEACHING ASSISTANT, BITS PILANI, K K BIRLA GOA CAMPUS

Jan 2020 - May 2020

- Helped first-year students by solving their doubts during weekly C programming labs.
- Set up coding questions for evaluative labs.

## Accomplishments

2020 **2nd Place**, Hack for Sustainability, Microsoft Global Hackathon

## Coursework

---

• **Computer Science:** Data Structures and Algorithms, Database Management Systems, Object-Oriented Programming in Java, Logic in Computer Science, Discrete Structures of Computer Science, Digital Design, Introduction to Computer Science COS 126 (By Princeton University), Network Management (By Nettech Private Limited), Theory of Computation\*, Operating Systems\*, Principles of Programming Language\*, Computer Architecture\*.

• **Machine Learning and Deep Learning:** Machine Learning (by Stanford University), Sequences-Time Series and Prediction (By deeplearning.ai), Convolutional Neural Networks, Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization, Structuring Machine Learning Projects, Neural Networks and Deep Learning, Sequence Models (By deeplearning.ai), Deep Learning Specialization (By deeplearning.ai)

\* = Ongoing

## Skills

---

Languages: C++, Python, C, Java, SQL, MATLAB

Libraries and Frameworks: TensorFlow, PyTorch, Keras, PySpark, NumPy, Pandas, Scikit-Learn

## Volunteering Experience

---

### Women in Machine Learning and Data Science, Goa chapter

CAMPUS REPRESENTATIVE

June 2020 - Ongoing

- Organizing events and workshops related to Machine Learning and Data Science and encouraging campus enthusiasts to participate in the same.

### Peer Mentorship Programme BITS Pilani, Goa Campus

MENTOR

Aug 2019 - May 2020

- Mentored a group of eight first-year students to adjust with college life routine.
- Held discussions to provide guidance in studying first-year courses and managing extra-curricular activities.