

## SAHIL BAIRAGI | 19CH10040

CHEMICAL ENGG. (B.Tech 4Y)



EDUCATION			
Year	Degree/Exam	Institute	CGPA/Marks
2023	B.TECH	IIT Kharagpur	8.86 / 10
2019	AISSCE	CBSE	93.6%
2017	AISSE	CBSE	10 / 10

#### **PROJECTS**

### Sum of Palindromes

- •Implemented a research paper on expressing every positive number as a sum of atmost 3 palindromes in any base >5 by Javier Cilleruelo, Florian Luca and Lewis Baxter.
- •Created a web interface with Flask as backend and AJAX in frontend to send requests.
- •Wrote tests to validate the results and compare the efficiency of program as compared to brute force algorithm.

#### **Resume Builder**

- •Created a website to **build** and **download resume in pdf format** using HTML, CSS and Javascript and hosted it as a github page.
- •Implemented features like adding and deleting bullet points, reordering sections etc.

#### **Ask Me Now**

- •Created a quizzing website using PHP and successfully hosted it on 000webhost.
- •Implemented features like generating **random sets of questions**, paginated leaderboard, displaying password strength etc.

#### **Command line Pokemon**

- •Created a terminal based pokemon game using **python**.
- •Implemented features like **saving and loading game**; battling gym leaders, levelling and evolving pokemons, learning new attacks etc.

#### SKILLS AND EXPERTISE

**Programming Languages:** Python, C, C++, Javascript, PHP **Web Development:** HTML, CSS, Bootstrap, Jquery, AJAX, Flask

Others: MySQL, Git, pandas, matplotlib

### **CERTIFICATIONS**

#### Linear Regression with Numpy and Python (Coursera Guided Project)

- •Implemented gradient descent algorithm from scratch and created a linear regression model.
- Visualized the data using matplotlib library.

#### **Neural Networks and Deep Learning (DeepLearning.Al)**

•Learnt the maths behind neural networks, vectorization, back propagation and activation functions.

## Improving Deep Neural Networks (DeepLearning.AI)

•Learnt how to improve neural network's efficiency with help of initialization, L2 and dropout regularization, batch normalization, adam optimization etc.

#### Convolutional Neural Networks (DeepLearning.AI)

•Learnt to build convolutional neural networks for object detection and recognition. Also learnt about neural style transfer.

#### **EXTRA CURRICULAR ACTIVITIES**

# National Service Scheme (NSS):

•During online semester, created a python script to **read and translate excel file** from one language to another using **google translate API**.

# **Programming events:**

- •Secured **Second place** among the 148 participating teams in **Open IIT Coding Hackathon 2020-21** organized by Technology Students Gymkhana, IIT Kharagpur.
- •Contributed to **7 open source repositories** during the **hacktoberfest 2020** event organized by Digital Ocean.