ANGELINA BACHHAN

**B.Tech 4th Year | Student | Developer**

**Results-driven Computer Science and Engineering student with self-taught full-stack development skills and a passion for creating things that live on the internet, be it websites, applications, or anything in between.**

# CONTACT

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# SKILLS

Matplotlib

**PROJECT WORKS**

## [GAN Optimization using Duality Gap](https://github.com/54nd339/ML_DA/blob/master/GAN/GAN.ipynb)

Implemented the concept of Duality Gap on various other optimisation algorithms of GANs to enhance performance. Achieved a faster rate of convergence for GAN components by trying to minimize a common objective function.

Successfully eliminated oscillation and mitigated other anomalies during the training process.

*Scripting/Coding*

GANs

Optimisations

Duality Gap

Autograd

PyTorch

Low-level programming using C Competitive Coding using C++ AppDev using Java or Flutter WebDev using HTML-CSS-JS

ML and Data Science using Python

*Web Development Tools*

Have used JS Frameworks like Next.js(React) and Vue.js

## [Nearest Neighbor Transformation of Quantum Circuits in 2D](https://github.com/54nd339/ML_DA/blob/master/QuantumComp/) [Architecture](https://github.com/54nd339/ML_DA/blob/master/QuantumComp/)

Developed an algorithm to minimize the insertion of swap gates in quan-

tum computing.

Strategically placed the qubits on a grid to reduce the overall number of required swaps.

Employed a Genetic Algorithm to identify the optimal path to minimise the total swaps.

Swap Gates

Skilled in CSS Frameworks like Tail- wind CSS and Bootstrap

Quantum Circuit

Nearest Neighbor Genetic Algorithm

Fluent in Backend Technologies like Node and Express



Implemented Databases like Fire- store, MongoDB, HyGraph CMS Hosted websites mostly in Netlify, Vercel, Digital Ocean

*Data Science and ML*

Have used ML libraries like Tensor- flow/Keras, Sci-kit Library

Matplotlib, Numpy, Pandas are the go-to libraries for Data Analysis

*Development Tools*

Comfortable with Version Control Tools like Git and Github

Skilled in code editors like VS Code GCP is the go-to cloud provider Have used Linux OS like Ubuntu, Kali

*Other Skills*

Have used Ethical Hacking Tools like Metasploit, Burpsuit, NMap

Can speak English, Hindi, Odia App Dev Lead in [KIIT KONNEXIONS](https://konnexions.netlify.app/)

# CERTIFICATIONS

[FreeCodeCamp](https://www.freecodecamp.org/54nd339) Certifications [HackerRank](https://www.hackerrank.com/94390sandeep?hr_r=1) Certifications

[NPTEL](https://archive.nptel.ac.in/content/noc/NOC23/SEM1/Ecertificates/106/noc23-cs44/Course/NPTEL23CS44S6330231104004337.jpg) Ethical Hacking Certification

## [Various Deep Neural Networks on Computer Vision](https://github.com/54nd339/ML_DA/tree/master/Colabs)

Successfully implemented an image captioning model leveraging the power of a CNN and a Transformer.

Applied Convolution LSTM to develop a Next-Frame Prediction Model. Effectively implemented the concept of Style Transfer and auto-encoders. Contributed to projects focused on Super-Resolution and Low-Light Im- age Enhancement.

Computer Vision CNN LSTM

Tensorflow

Deep Learning

## Various Web Projects

An [E-Commerce Website](https://radon.sandeepswain.dev/) built using Next.js, Tailwind CSS, Mongo DB with integrated secure payment using Stripe API

A [Social Media Website](https://social.sandeepswain.dev/) built using Next.js, Tailwind CSS, Mongo DB with a custom server using Express environment to implement Socket.io.

An [Algorithm Visualiser](https://algos.sandeepswain.dev/) built using Next.js and Tailwind CSS with state management using Redux.

An Online Classroom Management website for Talent Sprint Classes, Berhampur using Vue.js and Firebase for hosting, auth and database Have made freelance websites for [KIIT KONNEXIONS](https://konnexions.netlify.app/) and [InU Cafe](http://54nd339.github.io/iaucr/).

REST APIs System Design Web Apps

Full-Stack Development

# EDUCATION

2020

## De Paul School, Berhampur Class 10th Percentage - 92.4%

2022

FIITJEE Junior College, Vijayawada Class 12th Percentage - 95.5%

2022-Present

## KIIT Deemed University CGPA as in 6th Semester - 9.2