Sandeep Kumar Swain

Student | Developer

contact@sandeepswain.dev

+91 9668026535

4A-143, KP-14, KIIT, Patia, Bhubaneswar - 751024

sandeepswain.dev

github.com/54nd339

linkedin.com/54nd339

codepen.io/54nd339

18th September 2002

PROFILE

Results-driven Computer Science and Engineering student seeking opportunities to leverage 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.

EDUCATION

B.Tech in CSE
KIIT University, Bhubaneswar
2020 – present
9.2 CGPA as per 6th semester

Class 12th
FIITJEE Junior College, Vijayawada
2018 – 2020
95.5% in IPE-AP board

Class 10th ICSE
De Paul School, Berhampur
2010 – 2018
92.4% in ICSE board

SKILLS

Scripting/Programming Languages
C, C++, Java, Python, HTML/CSS, JavaScript

Web Dev
Next.js(React), Vue.js, Tailwind CSS, Bootstrap Node, Express

Databases
Firestore, MongoDB, HyGraph CMS, SQLite

Data Science
Tensorflow, Keras, Numpy, Pandas, Matplotlib

DevTools
Git, GitHub, VSCode, Netlify, Linux, GCP, Firebase

PROJECTS

GAN Optimization using Duality Gap
November 2022 – present
- Implemented the concept of Duality Gap on Other Optimization Algorithms of GAN to enhance performance.
- Achieved a faster rate of convergence for GAN components by utilizing a common objective function.
- Successfully eliminated oscillation and mitigated other anomalies during the training process.

Nearest neighbor Transformation of Quantum Circuits in 2D architecture
April 2023
- Developed an algorithm to minimize the insertion of swap gates in quantum 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 for executing swaps.

Various Deep Neural Networks on Computer Vision
- Successfully implemented an image captioning model leveraging the power of a CNN and a Transformer.
- Applied Convolution LSTM to develop a robust Next-Frame Prediction Model.
- Effectively implemented the concept of Style Transfer and auto-encoders.
- Contributed to projects focused on Super-Resolution and Low-Light Image Enhancement.

Web Projects & System Designs
- E-Commerce Website (Radon)
- Social Media Web-App (SocialFair)
- Algorithm Visualizer (AlgoViz)
- Online Classroom Management (TS Classes)
- Freelance Sites for Konnexions and I&U Cafe