SIDDHARTH PANDA

ML and Data Science enthusiast.

PERSONAL PROFILE

I am a third year B.Tech student in KIIT University, Bhubaneswar. I am interested in pursuing a career in Data Science and Machine Learning.

GET IN TOUCH

- Mobile : 7749821508
- Email : sidkiit12@gmail.com
- Github : https://github.com/Sidray-Infinity
- LinekdIn : https://www.linkedin.com/in/siddharth-panda-66241b36/

CORE COMPETENCIES

- Python
- Data Analytics
- Machine Learning/Deep Learning
- C/C++, Java
- Wolfram
- HTML, CSS, JS, Flask
- Database Management System
- Networking
- Data Structures and Algorithms

OTHER SKILLS

- Creative and imaginative
- Can work under pressure
- Has excellent attention to detail
- Willingness to work long hours

PREVIOUS EXPERIENCE

IMAGE PROCESSING AND ML INTERN

Khosla Labs Private Ltd. | Summer of 2019 (6 Weeks)

- Made an automatic document capture module, to capture and extract Aadhaar and PAN cards from a frame, using **OpenCV**(python**)**.
- Integrated the document capture module with the **Google Vision API** to perform OCR on the captured card.
- Created a parser, to identify the string types, like name, DOB etc, from the output of the OCR.
- All the above modules were finally combined and converted to an **android application.**
- Created an image rectification tool, which straightens an image, based on the bounding points as input.

ACADEMIC PROFILE

KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY

B.Tech in Computer Science and Engineering, Graduating 2021

- **CGPA : 9.01**
- Qualified for the Ericsson's Industrial Elective Program.

O.P. JINDAL SCHOOL

- 10th Marks : 9.4
- 12th Marks : 84%

PROJECTS

- **SELF DRIVING CARS IN VIDEO GAMES**

  - The idea was to predict the movement of the vehicle, entirely based on the captured frame of the video game.
  - Based on the frame, the model decides the best move out of 9 possible moves. Hence, it becomes a **classification problem.**
  - The network I used for training was a modified version of AlexNet, which was trained on a dataset of size 460k.
  - To improve the efficiency of the model, a custom object detection model was used, to avoid collisions and keep the vehicle on road.
  - Future improvements ideas:
    - Replacing TensorFlow object detection model with YOLO v3.
    - Adding more logical layers on top of the model like:
      - Semantic Segmentation
      - Free space detection

- **CHESS ENGINE**

  - The idea was to create a chess engine using Neural Networks.
  - To handle the logistics requirements of the chess game itself, like creating a board and playing a move, I used the library 'python-chess'.
  - The dataset I used was from FICS Games Database, containing data of 100k games.
  - The network used was a ConvNet with 12 convolution layers.
  - Based on the board state, the model decides the side for which, it's best suited for; -1 for black and 1 for white.
  - The game was finally deployed on a flask server, with the black side being the model, and the white side being the player whose moves were taken as input on a text box.