SARANGA KINGKOR MAHANTA

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EXPERIENCE

The Sparks Foundation
Computer Vision Intern

📅 Dec 2020 – Jan 2021

- Fine-tuned **VGG19** to build a **real-time face mask detector**
- Exploited **K-Means clustering** to identify major colours in an image and search images having a particular colour via colour name

Utkarshini Edutech
Machine Learning Research Intern

📅 Dec 2019 – Feb 2020

- Conducted a comparative study on **Conv Nets** and various architectures: **LeNet-5, AlexNet, VGG-16, GoogLeNet/Inception-v1-4, ResNet-50 , Xception, Inception-ResNet-V2**
- Formulated pellucid documentations

KEY PROJECTS

Multi-class Musical Instrument Recognition
Dec 2020-Jan 2021

- Paper '**Deep Neural Network for Musical Instrument Recognition using MFCCs**' under review at **ICACDS 2021**
- Extracted Mel-Frequency Cepstral Coefficients from monophonic audio clips
- Architectured a **deep neural network**, achieved a new SOTA accuracy on the London Philharmonic Orchestra Datasest

Topic Extraction and Modelling from Online Chats
Aug 2020-Oct 2020

- Implemented **Latent Dirichlet Allocation** to cluster topics in text dialogues
- Locally deployed a **WordCloud generating web-app** of uploaded **Whatsapp Chat** text file using **Flask**

Spam, Random Text and Abusive Words Classifier
July 2020-Aug 2020

- Built a proficient Spam Classifier using the **Multinomial Naive Bayes** algorithm
- Performed additional hardcoding to detect random gibberish texts and selected abusive words

Facial Expression Recognition
May 2020

- Architectured a **CNN** to efficiently classify among five emotions-Happy, Sad, Neutral, Angry and Surprise
- Real-time facial expression recognition through the webcam using **OpenCV**

EDUCATION

National Institute of Technology Silchar
B. Tech, Electronics and Communication Engineering

📅 2018 – 2022 (exp.)   📍 Silchar, Assam

CPI (abs): 8.32

Army Public School, Narangi
Intermediate Science

📅 2016 – 2018   📍 Guwahati, Assam

Percentage: 92.6 %

Sarala Birla Gyan Jyoti
Matriculation

📅 2004 – 2016   📍 Guwahati, Assam

CGPA: 10.0

POSITIONS OF RESPONSIBILITY

Machine Learning Club, NIT Silchar
Core Member

📅 Sept 2019 –Present

- Club Objective- Providing mentorship to ML enthusiasts and develop the ML/DL culture in college
- Club activities include conducting classes, hosting quizzes, and ML hackathons

TECHNICAL STRENGTHS

Languages

C, C++, Python, HTML, CSS, MySQL, MATLAB

Software & Tools

Git, LaTeX, Adobe Photoshop

Libraries & Frameworks

Keras, PyTorch, Flask, NLTK, OpenCV, Librosa, Scikit-learn, Pandas, NumPy, Matplotlib

Domains

Computer Vision, NLP, Speech Processing, Adversarial Machine Learning, Data Structures & Algorithms

ACHIEVEMENTS

- Finalist in the **National Crystal Ball 2020 Hackathon** organized by Blue Yonder
- Grand Finalist in **Smart India Hackathon - 2020**, organized by **MHRD**, **Govt of India**
- Organized **Electro-hunt** in Spectrum 5.0 (technical event)
- Winners of **Robo-Soccer**, **Tecnoesis** 2018 in NIT Silchar