Rishal Aggarwal

Gmail | Github | Linkedin | +917829294080

EDUCATION

BITS Pilani
B Pharmacy
Expected May 2020

AECS MM Public School
CBSE 2016 (Senior Secondary Examination) | Karnataka, India
Percentage 96.1(PCM)

Delhi Public School Bangalore East
CBSE 2014 (Senior Examination) | Karnataka, India
C.G.P.A 9.8

SKILLS

Programming languages:
- Python
- C++
- C
- Java
- Matlab
- R

Others:
- Photoshop
- Microsoft Office
- Tensorflow
- Linux
- Excel
- Keras

COURSEWORK

BITS Pilani
- Optimization
- Information Retrieval
- Image Processing
- Machine Learning (ongoing)
- Bioinformatics (ongoing)

MOOCs
- Machine learning by Andrew NG
- Deep Learning Specialization By Andrew NG

EXPERIENCE

GE HEALTHCARE | EID Intern
May 2018 – July 2018 | JFWTC, Bangalore

- Got accepted as an 'Early Identification Intern' at GE Healthcare.
- Worked on segmentation of the vertebrae column using volumetric (3D) MRI body scan images and 3D convolutional networks.
- Achieved high accuracies with dice coefficient values above 0.85

PIXXEL | AI Engineer
May 2018 – Sep 2018 | BITS Pilani, Pilani Campus

- Pixxel is a startup on campus that is working on building nano satellites and using satellite imagery to develop algorithms in sectors such as agriculture, mining and transportation.
- Worked on developing algorithms that could predict amount of crop harvest at the end of Rabi and Kharif crop seasons in India using multispectral landsat imagery.
- Mentored the project team on the next steps like calculation of the right spectal bands, simulation of crop growth etc.

LAZADA (AN ALIBABA COMPANY) | Data Science Intern
May 2017 – July 2017 | AXA Tower, Singapore

- Improving customer experience on the Lazada online platform by removing duplicate product listings through NLP and string manipulation. https://www.lazada.sg/.
- Created a logic on multi-sourcing products with similar product titles in different languages such as Thai, Vietnamese and English.

PROJECTS

FAKE NEWS DETECTION
Features such as tf-idf, punctuation count, readability and PCFG were extracted from the LIAR dataset.

The performance of various linear classifiers such as Naive Bayes, Logistic Regression and SVM were compared for the task.The code repository and detailed report for this project can be found **here**.

CANCER BIOPSY DIAGNOSIS USING DEEP CNNS | Supervised by Dr. Aniruddha Roy
Built a CNN classifiers to diagnose breast cancer based on HE stained histopathological biopsy slide images. Furthermore developed Class Activation Maps (CAMS) for these classifiers to gain insights. This project is still in progress.The code repository and detailed report for this project can be found **here**.

3D CNN FOR ALZHEIMER'S DETECTION
Developed a data pre-processing pipeline for 3D brain MRI T1 weighted scans to be fed into a Deep Convolutional neural network to support classification of diagnosing Alzheimer's Disease using the MRI image. Furthermore explored various methodologies of Deep Neural Networks to train the neural network. The code repository and detailed report for this project can be found **here**.