Aviral Agrawal

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EDUCATION

BITS PILANI
B.E.(Hons.) Computer Science
Grad. Jul, 2020 | Pilani, India
CGPA: 9.18/10

ASN SR. SEC. SCHOOL
Standard XII
Grad. May 2016| New Delhi, India
Percentage: 95.2%

AMITY INT'L SCHOOL
Standard X
Grad. May 2014| Noida, India
CGPA: 10/10

COURSEWORK

Machine Learning • Data Mining • Data Structures and Algorithms • Object Oriented Programming • Database Systems • Operating System • Computer Networks • Compiler Construction • Principles of Programming Languages

SKILLS

TensorFlow • Keras • Neural Networks • Java • C • Python • R
Familiar:
Assembly • Android • MySQL

SCHOLARSHIPS

SCHOLARSHIP AMERICA
2017 - 2019
Based on performance ranging from academics to extra-curricular activities.

KISHORE VAIGYANIK PROTSA-HAN YOJANA
2014
Awarded by the GOVERNMENT OF INDIA for my Research aptitude and scientific thought process.

AWARDS

Bengalathon 19-20 | University Merit Scholarship | 2016 • Certificate of Merit | 2016 • Certificate of Merit | 2014

EXPERIENCE

AMAZON MACHINE LEARNING | Research Engineer Intern
Jan 2020 – Jul 2020 | Bangalore, India
- Deliverable has huge impact on the company's customers in Asia region.
- Designed a Language generation model for on-the-fly Text generation. The flow consists of Named Entity Recognition tasks, Building Nearest Neighbour constructs, followed by a custom-made language model which is used to generate text using Beam Search on a greedy selection tree.
- Designed a Text Classification pipeline consisting of appropriate data-preprocessing followed by the application of Deep Learning (LSTM and CNN) to solve the NLP problem.

SAMSUNG RESEARCH INSTITUTE | Research Student Trainee
May 2019 – Jul 2019 | Bangalore, India

- Employed Deep Learning to solve a novel Computer Vision problem.
- Devised a hybrid pipeline for providing an end to end solution to AI Based Multi Camera Problem which seeks to enhance image resolution.
- Collected the entire dataset required and performed adequate data-preprocessing as the first leg of the pipeline followed by research and implementation of the entire network for building the solution using TensorFlow.

MAPMYINDIA | Research Intern
May 2018 – Jul 2018 | New Delhi, India
- Devised a new Database schema for the company's Navigation and tracking data dump to significantly reduce the computation time taken in user commute time prediction purposes.
- Devised a predictive algorithm for intelligent imputation of missing values in data using a Machine Learning based approach.

PROJECTS

REAL TIME IDENTITY DETECTION SYSTEM
Aug 2019 – Dec 2019 | BITS Pilani

Devise a system to identify a person at a certain location that can be effectively installed at required entrance points and create value in real time. System is highly scalable, user friendly, and has even won the Bengalathon 19-20.

COMPILER CONSTRUCTION
Jan 2019 – May 2019 | BITS Pilani

Designed a compiler for an artificial C-like language from scratch, implementing all the necessary structures to output a final executable code.

FCN FOR ACTION RECOGNITION
Aug 2018 – Dec 2018 | CEERI Pilani, Govt. of India Research Institute

The project aims at designing a model for accurately determining action in videos. The project is then used to identify a particular action class in surveillance videos.

HEART DISEASE PREDICTION USING DATA MINING
Aug 2018 – Dec 2018 | BITS Pilani

Several Data mining techniques were used to predict the vulnerability of a person to heart disease based on many parameters observed.