

Mridul Nagpal

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EDUCATION

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY, HYDERABAD

B.TECH IN COMPUTER SCIENCE AND ENGINEERING

Expected May 2020

CGPA: 8.57/10

ADARSH PUBLIC SR. SCHOOL, DELHI

SENIOR SECONDARY, CBSE

Percentage: 97.2/100

SECONDARY, CBSE

CGPA: 10/10

COURSEWORK

Data Structures and Algorithms

Convolutional Neural Networks

Machine Learning Algorithms

Operating Systems

Linear and Abstract Algebra

Introduction to Databases

Artificial Intelligence

Structured Systems Analysis and Design

Graphics

Natural Language Processing

Database Systems

Statistical methods in AI

Linear Algebra

Game Design and Engg.

TECHNICAL SKILLS

Python • Javascript • C++ • C •

MATLAB • Git • Django

HTML • CSS • Ruby on Rails •

Jupyter • MySQL • Shell Scripting •

Unity • Octave • Numpy • Keras •

sklearn • Tensorflow • Bootstrap •

Scikit learn • PHP • Pytorch •

OpenCV • Numpy • Scipy • React JS

• Node JS • Leaflet • Deep Learning

• Generative Networks • Java

WORK EXPERIENCE

SOFTWARE ENGINEERING INTERN

GOOGLE

May '19 – Jul'19

Working as a SWE intern in Google BLR. My project involves migration of an internal Google tool name Billy to a new platform. This majorly involves stack development in Java and design thinking skills.

QATAR COMPUTING RESEARCH INSTITUTE

FREELANCE RESEARCHER

Sept '17 – Present

Working as a freelance researcher for QCRI. One of the projects included creating faces on some conditions using generative networks. Others were related to Natural Language Processing, Computer Vision, Machine Learning, Probability and Statistics.

ABATAR

CO-FOUNDER

April '18 – Present

Abatar is a startup based on text classification for social media platforms. It helps to organize daily social media data and creates a chatbot which replies on your behalf. Also it suggests people what to post next.

[Work summary](#)

GOOGLE SUMMER OF CODE 2018

STUDENT DEVELOPER AT PUBLICLAB

May '18 – Aug'18

Made a javascript library as an extension to leaflet-blurred-location. As a project for PublicLab to display locations of people keeping security in mind in a clever way. Also worked on new features for leaflet-blurred-location.

[Work summary](#)

GOOGLE SUMMER OF CODE 2017

STUDENT DEVELOPER AT PUBLICLAB

May '17 – August '17

Made a javascript library integrated to PublicLab. A Leaflet-based HTML interface for selecting a "blurred" or low-resolution location, to preserve privacy. Converting text to location and vice-versa using APIs in real time.

[Work summary](#)

NATIONAL INFORMATICS CENTER

SOFTWARE DEVELOPER INTERN

Dec '16 – Jan '17

Worked with the UI/UX revamp of the intranet website for the petroleum ministry under National Informatics Centre. Used HTML and CSS to build the frontend and Javascript for the backend and content managing.

INTERESTS

Deep Learning and Computer Vision (Implemented deep learning models like VGG net , Deep Convolutional Neural Network, Inception Net and many more.) Natural Language Processing, Recurrent Neural Networks, Convolutional Neural Networks, Generative Adversarial Networks, Long Short Term Memory, Creating a human Clone

POSITIONS

OSDG Admin, 2017-18, IIITH
E-Cell Tech Head, 2017-18, IIITH
Machine Learning Club Head 2017-18, IIITH
OSDG Head, 2018-19, IIITH
E-Cell Corporate Relations Head 2018-19, IIITH
Football Team Captain, 2014-15, Adarsh Public School

ACHIEVEMENTS

ACADEMICS

Received Academic Excellence Award Dean's List for Academic Year 2016-17

JEE Mains : Ranked 405 among 1.2 Million people.

JEE Advanced: Ranked 1641 among 100,000 people shortlisted by JEE Mains.

HACKER EARTH

Ranked 27 out of 500 in a challenge by D.E.Shaw named D.E.Code about investment prediction using deep learning

KAGGLE

Got a bronze medal for a kernel given to top 10% contributors for that problem.

HEAD BOY

Titled as the school head boy and the Student Council Head for the year 2015-16.

PROJECTS

PROVOCATIVENESS OF ONLINE NEWS MEDIA

Rating Online Content Based on Toxicity of Its Comments.

There are a plethora of works focusing on detection and classification of online hate. Yet, few studies aim at developing metrics for decision makers to better understand online hate in their social media content. This research undertakes that challenge and introduces provocation score, a measure for hatefulness of online videos, based on hateful comments.

AIRLINE PREDICTION

Creating a recommender system to suggest the next destination of a passenger with his/her basic information such as age, gender, etc. and some information from the passengers' past flight records. Using LightFM and Surprise algorithms.

LightFM is a Python implementation of a number of popular recommendation algorithms for both implicit and explicit feedback.

It also makes it possible to incorporate both item and user metadata into the traditional matrix factorization algorithms. It represents each user and item as the sum of the latent representations of their features, thus allowing recommendations to generalise to new items (via item features) and to new users (via user features).

INDEED RESUME PARSER

Built a web scraper to get resumes from <https://indeed.com/> using email accounts as payloads and creating new sessions in some intervals of time making it as humanly as possible, preventing it from getting banned by indeed. Successful in getting about 10k resumes and can get more by just entering job description and location.

CONNECT-4 AI BOT

Implemented an AI bot in C++ to play a Connect 4 game in 3 levels based on depth. Used alpha-beta pruning and Mini-Max Algorithm with heuristic functions.

EYE-TRACKING MODEL

Used python to create a deep learning model to predict where to render images/text on a webpage where the user would notice it.

LINUX SHELL

Implemented a Bash like shell in C that supports piping, i/o redirection, basic linux commands and keyboard interrupts using system calls.

FACEBOOK AD RATING MODEL

A deep learning model to predict the performance of Facebook Ads, using just the information facebook requires while posting and give suggestions for improvements.

SMODEX

Made a few scripts and web crawlers for SMODEX (a startup) to gather some data. Currently working on creating a deep learning NLP model for resume parsing, which can be used to improve hiring policies as well fasten the process of hiring