Aditya Jain

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SKILLS

PROGRAMMING

Python | IPython
Java | Android Programming
C | C++
HTML | JavaScript | CSS
Node.js | Express.js
SQL | MongoDB

DATA SCIENCE | ML

Descriptive Statistics
Inferential Statistics
Regression Algorithms
Classification Algorithms
Clustering Techniques
Ensemble Techniques
Neural Networks | Deep learning
CNN | Sequence Models
Natural Language Processing
Reinforcement Learning

CS Concepts

Operating System Concepts
Data Structures and Algorithms
Cloud Computing
DataBase Management Systems
Data Mining
Design and analysis of algorithms
Business Analytics & Intelligence
High Performance Computing
Software Engineering

SOFTWARES AND TOOLS

Pandas | Numpy
Matplotlib | Seaborn
Scikit-Learn
Tensorflow | Keras | Pytorch
MS Excel | Tableau (Basics)
Linux | Windows
Git and GitHub

EDUCATION

Bachelor of Engineering (Computer Engineering)

Maharashtra Institute of Technology, Pune
Graduation : July, 2018 | Aggregate : **74%**

H.S.C. (12^{th})

Central Board of Secondary Education
Completion : May, 2014 | Aggregate : **89.2%**

EXPERIENCE

Associate Data Scientist | Cognizant

Sep 2018 - Current | Bengaluru, Karnataka, India

- Performed **Data Analysis and Predictive Modelling** for identifying Aetna medicare contracts' members at risk.
- Identify members for reaching out to improve Aetna medicare contract Star Ratings.

Intern | Heelium Sports Pvt. Ltd.

Dec 2016 - Dec 2017 | Pune, Maharashtra, India

- Worked on various mean stack technologies like **node.js, mongodb, express.js** etc to develop the company's website.
- Worked on **android development** for connecting web backend with android app.

CERTIFICATION

Deep Learning Specialization | DeepLearning.ai

Completion : June 2019 | Credential : AMS3W8UNB6PW

- This specialization on coursera helped me learn the various advanced topics of Deep Learning, Hyperparameter Tuning, Regularization, Optimization Techniques, Convolution NN, Sequence Models and more.

Reinforcement Learning Specialization | University of Alberta

Completion : October 2019

- This is a course of Reinforcement Learning on coursera, and it helped me learn various concepts like foundations of RL, policy/value iteration, Monte-Carlo and Temporal Difference Learning, Deep Q Learning and more.

ACHIEVEMENTS

- First runner up in Smart India Hackathon 2017 where students from all around the India participated in the event. We had developed an android app to perform authentication of a student appearing for an exam using **biometric from Aadhaar Database**. This system was more robust, fast and secure than the traditional system used.
- Finalist in Infosys Techzooka Hackathon 2016, we as a team of 3 students had developed an android application to show details of nearby grocery stores and offers based on **user location**, we have used **firebase** as a database.
- Ranked in top 3000 among people from around the world in HackerRank "**Algorithms**" section. Also I have a gold badge on SQL and Algorithms on Hackerrank.

PROJECTS

- **Maintaining Physical and Mental Health using Health Outcome Survey | Cognizant | 2019**: Used **data analytics and predictive modelling** on HOS Survey, demographics, claims data, prescription data etc to predict the members at the **risk of mental and physical health decline.** And also performed analysis on best outreach method to target these members to improve their health and also to improve CMS star ratings of healthcare contracts.
- **Churn Prediction/Retention Modelling | Cognizant | 2019**: Used various **statistical and machine learning techniques** to predict members who are likely to get churned, and targeting these members using various outreach strategies to prevent churn.
- **Flappy Bird Reinforcement Learning Agent | Link | 2019** : Flappy Bird Game trained on a **Double Dueling Deep Q Network** with Prioritized Experience Replay implemented using Pytorch.
- **Kinship Detection using Siamese Network | Link | 2019**: Implemented **Siamese Network** using Keras to detect kinship among two persons with faces given. Used **VGGFace** to generate face embeddings. Siamese Network can be used for one shot learning which do not require extensive training samples for image recognition.
- **Dictionary Chatbot | Link | 2018**: Built a chatbot using **AWS Lex, AWS Lambda** for serverless computing and **Oxford API** to get meaning of word. Chatbot can be integrated with slack communication channel.
- **Host Based Intrusion Detection System | Final Year Project | 2018 :** We had developed a HIDS as a **B.E. Project** which is used to prevent the host system from being compromised by intruders. Project relies heavily on the use of **security concepts**, **machine learning** and **operating system concepts**.

THESIS | BLOGS

- **Convolutional Neural Network for Autonomous Robot Navigation | 2017 | Thesis | Unpublished:** I have presented my junior year seminar report on Convolutional Neural network which can be used for robot navigation. I have firstly discussed various other models eg SVM, which are promising and later discussed about ConvNets with different architectures such as YOLO, UNets, resnet gives best results for autonomous navigation problem.
- **Attention Mechanism For Machine Translation | 2019 | Blog | Link:** After completing Deep Learning Specialization Course, I decided to write a blog on Attention mechanism and its working so that it could be helpful for others and also build a **demo model for date translation.**
- **Policy Optimization in Known MDP Environment | 2018 | Blog | Link**: I had written a blog on Policy Optimization techniques such as **Value Iteration** and **Policy Iteration** which doing a Reinforcement Learning Course of David Silver.
- **Monte Carlo and Temporal Difference Learning | 2019 | Blog | Link:** This is again a blog for policy optimization techniques but in unknown MDP environment, this is also inspired from RL course of David Silver and here I have written about **Monte Carlo Methods, On-policy Sarsa and Off-policy Q-Learning**.
- **Deep Q Learning and Improvements in DQN | 2019 | Blog | Link**: Here I have written about building a flappy bird game RL agent using Deep Q learning. Also I had described and used various techniques such as **Dueling architecture and prioritized experience replay** to improve training of agent.

ADDITIONAL INFORMATION

- One of the **organizers** of national level event "Linuxication" for three consecutive years 2016,2017 and 2018. This event aims at teaching open source technologies such as GIT, Linux etc to new students.
- Member of **MCUG (MIT computer users group)** in 2016, 2017, 2018 which conducted various technical events and sessions throughout the year.
- Member of MCUG **newsletter team** in college for year 2016.
- **Volunteer for "Animal Care" and "Save the Environment"** campaign for Cognizant Outreach Program in 2019.
- **"Joint Event Coordinator"** for a colleges' technical Event "Texephyr" in the year 2017, where I helped in organizing some coding competitions.

TESTS

GRE (2019) : 324 (Verbal : 157, Quant : 167, AWA : 4)
TOEFL (2019) : 110 (Reading: 28, Listening: 28, Speaking: 27, Writing: 27)

PERSONAL DETAILS

Name : Aditya Jain
Date of Birth : 10/05/1996
Languages : English, Hindi

LINKS

Github:// adityajn105
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Kaggle:// adityajn105
Projects page://Link
Blogs page://Link