SAUMYA PANDEY

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EDUCATION

Masters in Computer Engineering, New York University **GPA:** 3.72 *Jan '21 - Present*
    Courses: Machine Learning, Programming with Data Science, Deep learning, Systems Engineering

Bachelor of Technology, Major in Computer and Communication Engineering, Manipal University Jaipur **GPA:** 3.7 *Aug '16 - June'20*

SKILLS

Advanced Skills: Python, C, Machine Learning, Data Analysis (data preprocessing, EDA)
Intermediate Skills: Neural Networks, Statistical analysis (referring ESL by Hastie, Tibshirani), Java, Web Development
Tools/ Platforms: Anaconda, PyTorch, Virtual Box, IntelliJ, Linux, Windows, MS Office, Cloudera CentOS

INTERNSHIPS

Research Intern *| National University Singapore* *June '18 - July '18*
- Collaborated with a team on a project on Heart Stroke Prediction, wherein a dataset was taken from Kaggle and various **machine learning** models were used to predict the chances of heart stroke in a person. **Spyder IDE (Python language)** was used in programming. The final accuracy was 94 percent with a **random forest algorithm**.
- Project idea was approved by the NUS professors in a 1-minute pitch, where I got an opportunity to work on the project with a professor for 6 months.

Learning Intern *| Hewlett Packard* *June '18 - July'18*
- Attended special lectures and classes of professionals on Big data using Hadoop.
- Got hands-on experience with **Cloudera CentOS**, Hive.

ACADEMIC EXPERIENCE

UNUM Project at CUSP, New York University *Link* *Jan'22 - Present*
- Working on UNUM (Unification for Underground Resilience Measures) under the guidance of Dr.Debra Laefer.
- Contributing in **data formatting, modeling and visualization** using **Bentley Software.**

Teaching Assistant for Data Science at GSTEM, Courant Institute of Mathematical Sciences *July'21 - Aug'21*
- Take recitations to teach and discuss concepts and worksheets, office hours to help with questions, help and guide a group of students in their data science research projects.
- Responsible for guiding 8 sincere and hardworking students in their **data science** projects during the Summer school.

Offline Script Recognition from Handwritten and Printed Multilingual Documents *Link* *March'21*
- A comprehensive survey of various techniques available for identification and recognition of multilingual scripts from the last few decades.
- Published in IJDAR

Monitor Bezzie *Feb'20 - May'20*
- A system to monitor the emotion and activity of a human being.
- The dataset consisted of 48x48 pixel grayscale images of faces.
- **YOLOv3** algorithm was used for object detection. Language used was **Python**.

Static Sign language Translation *Jan'19 - April'19*
- The motive behind working on this project was to develop a system to help the deaf and dumb with independent communication.
- For the dataset, static gestures images were taken which closely matched the MNIST dataset format.
- Using the CNN model, the test images were predicted, with an accuracy of 92 percent.

Detection of Phishing Websites using ML *Aug'18 - Nov'18*
- Analysed the structure of the website, considering 14 features, based on which website was classified as fraud or legitimate.
- Dataset was taken from Kaggle. Used various machine learning algorithms comparing them with various concurrent models by evaluating their performances using different metrics.
- Out of many classification algorithms, random forest gave the best result, with an accuracy of 84 percent.

HONORS AND COMMUNITY INVOLVEMENT

- Got accepted for Google CSRMP 2021 out of a pool of highly competent applicants.*(2021)*
- Received PRAISE (Publication and Research Award Incentive for Students to Excel) from Manipal University. *(2021)*
- Mentor for Girls in STEM at WoMentorship, OSARC, NYU *(2021)*
- Idea for a project got accepted in top 12 ideas out of total 120 ideas at NUS, Singapore.*(2018)*
- Gold Medalist in nation-wide English Essay Writing competition. *(2012)*