Shivam Sharma

Data Scientist

23 January 1995

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Education

M.Tech Computational Biology,
IIITD | 2019 | CGPA: 8.9/10

B.Tech Information Technology,
CIC, DU | 2017 | 77.79 %

Skills

Languages: Python, R, C/C++, Java, Matlab, SQL
Other: Git and JIRA

Databse: PostgreSQL, MySQL, AWS

Expertise: Machine Learning, Statistical computation, Health care data analysis, Parallel Computation in C.

Extra-Curricular

2016|Para legal Volunteer Training (DSLSA)

2011|Bronze in International Informatics Olympiad

2006|Gold in National Cyber Olympiad

About me

- Result Oriented Professional offering 1 year of industrial exposure in Machine Learning, Deep learning, Data Analysis and Computer vision
- Knowledge in Machine Learning, Statistical computation, Health care data analysis in Python and R

Work Experience and Internships

Jan'20 **Data Scientist** **KnowDis Data Science LLP, Delhi**

Worked on Computer vision problem:

- Performed surgical objects recognition using Mask R-CNN
- Worked on Yolo v3, faster R-CNN, Resnet101
- Deployed the model as a flask application
- Optimised the performance upto 80% for real time prediction

March'19 **Data Scientist** **Circle Of Life, Delhi**

Deliverable:

- Data analysis and ML model implementation in R and Python
- Data engineering, providing assistance in product deployment and building new feature in the product.
- Antibiotic Panel Prediction using recommendation system
- Outlier Detection for Bacteria Prevalence
- Trend-line analysis for detection of increase in antibiotic bug resistance
- APIs and ETL implementation in Python with PostgreSQL
- Provided support in onsite deployment of the product Zevac (inspired from my M.Tech thesis)

July-2018 **Industrial Thesis and Data Scientist Intern** **Circle Of Life, Delhi**

Towards personalized antibiotic prescription in the management of urinary tract infection:

- Analyzed large culture and patient demographic data in predicting susceptibility of antibiotics
- Implemented multinomial logit model for Etiological feature correlation with bacterial occurrence.
- Antibiotic similarity detection using Cohen's kappa

2016-2017 **Project Fellow** **Indian Statistical Institute, Delhi**

Implemented efficient public-key cryptosystem based on an elliptic curve from scratch, relying only on large-number arithmetic libraries like GMP NTL & MPI in C/C++.

Research and Projects

2018 **Hate Speech and emotion detection with anti-bias conversion using text based style transfer**

- Emotions prediction using SVM
- Used style back translation technique to generate non-offensive sentences

2017 **Prediction of Plant Encoded Viral RNA suppressor proteins**

Implemented SVM and Adaboost to predict Plant encoded viral RNA as suppressor protein using the Plant protein dataset.

Publications

2019 **A Game Theoretic Model of Deceptive Ambush as Countermeasure for Habitat Selection in Cross-Border Infiltration (Link)** Springer

2015 **Extension of Josephus problem with varying Elimination Steps (Link)** DU Journal