



Shivam Sharma

Roll No: MT17147, Email: shivam17147@iiitd.ac.in

Skype ID: shiva.iuac@gmail.com

DOB: Jan 23, 1995

Address: Arihant Arden, Flat 1504 Block E, Bisrakh, Greater Noida, UP

Education

Indraprastha Institute Of Information Technology, Delhi

M.Tech(Computational Biology)

2017-Present

CGPA:

8.95

Cluster Innovation Centre, University Of Delhi

B.Tech Information Technology (with mathematical Innovation)

2012 – 2016

Percentage:

77.79

Kendriya Vidyalaya, Delhi

Senior Secondary, CBSE

2012

Percentage: 81.6

Kendriya Vidyalaya, Delhi

Secondary, CBSE

2010

CGPA:

9

Skills

Expertise Area Machine Learning, Statistical computation, Health care data analysis, Data Science , Parallel Computation in C.

Programming Language C/C++, Python, R, Java

Tools and Technologies MATLAB, R,

Database MySQL, MongoDB

Thesis Project

Thesis : In silicon prediction of Bacteria and Antibiotic susceptibility using hospital data for UTI

(June,18 – ongoing)

Guide : Dr Debarka Sengupta (Faculty IIITD)

Project : The research aims to provide direction to clinicians as to whether a particular episode of infection is likely to respond to a given antibiotic. Utilizing in-silico methods for research to predict drug sensitivity and chronic disease outbreak can help hospitals manage unbearable burden on the health and economic status of a patient.

Internship/Work Experience

Circle Of Life, Delhi

(June,18 – ongoing)

Position: Data Scientist Intern

Project : Healthcare facilities in India are currently overburdened since they have to cater to massive population of the country. This is accentuated by the shortage of resources. Machine learning and data science has the potential to improve this current state of affairs. Hence, this study aims to utilize machine learning models and data science to improve the health status of patients through the following use cases.

Indian Statistical Institute, Delhi (Research)

(June,16 –July,17)

Guide: Prof. Shanta Leishram

Team Size:2

Position: Former Project Fellow

Project :'DRDO CARS project: Implementation of Attacks on Elliptic curve discrete log problem'. Implemented both non-generic attacks like Pholig Hellman to solve ECDLP over 40-bit finite field and generic like Parallelized Pollard's Rho attack to solve ECDLP over a 64-bit finite field using Distinguished point property.

DRDO DTRL Labs Delhi (Research)

(Jun,14 –Jun,16)

Guide: Dr A K Sinha(Scientist 'G')

Team Size:5

The work deals with a Cognition-based modelling to analyse scenarios of Habitat Selection, Dilemma Resolution and Deception. Designed a cognitive agent for battlefield navigation and for taking an optimal cognitive decision in battle-field implemented in Unreal Engine and MATLAB.

Pixvera: Know the truth behind the pixels

(Jun,14 –Jun 15)

(Developer)

Team Size:2

Worked on developing an algorithm for calculating similarities in trademarks to prevent Copyright infringement of official symbols used by companies. The images are fetched by a crawler, from the web, developed in python.

Design Innovation Center, Delhi University(Industrial Project)

(Jun,13 –Jun,15)

Guide: Dr A K Sinha(Scientist 'G')

Team Size:5

Project:'Technology Development Program'(IT Maha Abiyan) under Design Innovation centre (DU, India), IamSMEofIndia (Union of Mini Scale Industries, Faridabad) And PHD Chamber of Commerce to provide technical support to mini-scale industries to plan and organize their company employees and customer data online.

Inter-University Accelerator Centre (IUAC)

(Jun,13 –Aug,13)

Studied the functioning of EXPeyes Junior(a product of IUAC).ExpEYES is from the PHOENIX project of Inter-University Accelerator Centre, New Delhi.

Projects

Skin image classification as diseased using image processing and Neural Net

(Nov,2017)
Team Size:2

Guide: Prof. Debarka Sengupta (IIITD)

We classified skin images as diseased or non-diseased for Dermatological disease detection using features extraction from accreted disease portion.

Improvement in prediction of Plant Encoded Viral RNA suppressor protein using SVM and AdaBoost

(Nov 2017)
Team: Individual

Guide: Prof. GPS Raghava (Faculty IIITD)

Prediction of Plant encoded viral RNA as suppressor protein using the Plant protein dataset.

Dexter ER2 Robotic Hand(Robotics)

(2016)
Team: Individual

Guide: Prof. Harendra Pal (Faculty DU)

Development of APIs for Controlling a five arm robot Dexter ER2. Modelling motion profile strings. Drawing of simple output primitives like a circle and straight lines using APIs developed in C sharp.

Delhi University Innovation Project

(2015)
Team Size-5

Guide: Prof. Pankaj Tyagi(Physics Faculty, DU)

Project: Design of Innovative IT based Modules for teaching Science and Mathematics to School and College Students.

AKS implementation(Cryptography)

(2014)
Team: Individual

Guide: Prof. Shobha Rai (CS Faculty, DU)

Studied the decrease in time complexity with parallel implementation of AKS Algorithm in MATLAB. AKS is an efficient Polynomial-Time Primality Testing algorithm.

Positions of Responsibility

- Research Fellow at Indian Statistical Institute, Delhi (June,16 – June,17)
- Paralegal Volunteer for Delhi State Legal Service Authority (June 2015)

Awards and Achievements

- Coursera Certification in Developing Innovation Ideas for New Companies: The First step in Entrepreneurship
<https://www.coursera.org/account/accomplishments/certificate/PDNXKARUG9>
- Winner Of National Cyber Olympiad and International Informatics Olympiad organized by Computer Literacy Foundation,2006

Interests and Hobbies

- Reading Books(Fiction)
- Playing football

Declaration: The above information is correct to the best of my knowledge.

Shivam Sharma

Date: June 16th, 2018

Github : [For further project Details you can view my GitHub Repo](#)