Mitali Sharma

PROFILE

Articulate & confident speaker as well as writer. A Student of Mathematics with a linguistic & technological background. Competent in areas of programming & databasing, as well as computation & transcription. Fluent in several languages.

CONTACT ME

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✉️ mitali120501@gmail.com

🖥️ Github Link

🖥️ Portfolio Link

EDUCATION

National Institute of Science education and Research

2019 - [present]
Integrated MSc, Mathematics
CGPA 8.43

IISER, Pune

2019-2020
Short-term Course – Bio-statistics - A User's Perspective

Delhi Public School (XII pass)
2019
CBSE 93.8%

SUMMARY

Education: School topper grade XII, pursuing MSc Mathematics at NISER, background in computer science

Experience: Research and coding.

- Academic writing, niche in review articles.
- Fluent in English, Hindi, Bangla, Kannada, Arabic.
- CopyTyping: 60AWPM, 80WPM
- Advanced Programmer (C, C++, Python, R, Pascal, Perl, Ruby, Visual Basic & VBA, Javascript & Java, PHP and Bash Script)
- Proficient in DB management using SQL in multiple platforms like MySql , SQLite and Web Database services like FireDb, as well as Macro Db Management Systems like Microsoft Access and Open Access
- Adept at macro software (MS Office, Open Office).
- Skilled graphic designer (procedural art, vector graphics).
- Both Unix and Windows.
- Passionate and competent origami enthusiast, constructing, analyzing, solving and folding models using varying techniques.
- Keen interest in computational biology, folding algorithms and music theory.

WORK EXPERIENCE

Research Intern

2019

Sekar Labs | IISc Bangalore

Created algorithms for searching complimentary secondary structures (motifs) in a huge-data collection scraped from NCBI resources, and optimized the algorithms for parallel computing. Coding using Perl, Python and Ruby. Algorithms based on Rabin-Karp approach.

ACHIEVEMENTS

INMO 2018-19
Represented Haryana at the Indian National Mathematical Olympiad, Department of Atomic Energy, Merit rank RMO 2018-19.

KVPY SB 2019-20
Selected for the scholarship, securing AIR 21.

NEST 2019-20
Secured all india rank 245.

NSEB 2019-20
Merit rank holder in National Standard Examination in Biology.

NCO 2018-19
Consistent state topper in SOF Olympiads (Science, Mathematics and CS), with international rank 47 in cyber olympiad 2018-19.

Mathematical Genius Award 2011-12
Secured all india rank 22 and state (Karnataka) rank 2.

COURSES UNDERTAKEN

Course	Grade Point
CS141-PROGRAMMING AND DATA STRUCTURES I	10
M101-MATHEMATICS I	9
CS142-PROGRAMMING AND DATA STRUCTURES II	10
M102-MATHEMATICS II	8
B203-BIOPHYSICS AND BIOSTATISTICS	7
M201-REAL ANALYSIS	4
M202-GROUP THEORY	8
M203-DISCRETE MATHEMATICS	6
M207-NUMBER THEORY	9
B403-BIOINFORMATICS	8
CS301-DESIGN AND ANALYSIS OF ALGORITHMS	9
M205-LINEAR ALGEBRA	10
M302-RINGS AND MODULES	9
M303-DIFFERENTIAL EQUATIONS	8
M306-CALCULUS OF SEVERAL VARIABLES	9

SKILLS

Communication:

Efficient communicator, comfortable in English, Hindi , Kannada, Urdu, Arabic and Bangla. Great social skills, capable of diffusing uncomfortable situations. Not afraid of crowds or public speaking.

Academic language:

Can understand, parse & simplify academic language comfortably (including scientific nomenclature used in novel research articles). Familiar with experimental procedures.

IT/Design:

Programming (Python, JS, VB, C++, etc) + Databasing (MySQL, Access). Can easily use macro software (e.g., MS Office) & graphic design (comfortable with GIMP, Photoshop, ProCreate, Illustrator), as well as procedural art and front-end development , adept at safely accessing & archiving online multimedia. Typing speed 60AWPM, good eye for errata.

General:

High aptitude for statistics, computational & analytical skills, socio-political awareness, avid long-distance runner.