

# SONIA SINGLA

Advisory Editorial Board Member at IJPBS and reviewer at ASTESJ Journal

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[aster28.github.io/solution2/site](https://aster28.github.io/solution2/site)

Looking for an appropriate job where I can apply my skills acquired during studies and Internship. Highly effective at incorporating creative leadership skills to achieve business objectives. Guide project with improved efficiency while meeting deadlines and budget requirements.

**Visa** - Eligible to work in U.K.

## KEY SKILLS

- Team Player and always ready to take initiatives to achieve the objectives, goals and targets
- Able to work in an organized manner despite Time pressure, possesses strong analytical skills and learning aptitude
- Highly motivated, flexible, arduous, Training of two months for IT skills, including computer programming language Java, Python.
- Proficient with Human Resource Management systems workday.
- English and Academic Skills certificate from University of Birmingham
- Programming languages such as Java, Python.
- Statistical computing software such as R, Databases such as MySQL.
- Office tools such as MS Word, MS Excel, Power Point

## Educational Qualifications

2011 – 2015 Due to personal family circumstances, I wasn't able to pursue my career goals after graduation, however I managed keep in touch with my domain by doing various eLearning courses (details mentioned later under training courses)

2009 - 2011 Master of Science in Bioinformatics, University of Leicester, U.K

(Main Subjects: *Gene and genome analysis, Proteins – introduction and tools available to analyze them, Bioinformatics related computing skills such as Java, Databases and Perl*)

2001 - 2003 Master of Science in Biotechnology, Bangalore University, India

(Main Subjects: *Genetics, Immunology, Molecular Biology, Microbiology and Statistics*)

1998 - 2001 Bachelor of Science, Himachal Pradesh University, India, (Main Subjects: *Botany, Zoology and Chemistry*)

## **Academic Research Activities:**

2009 - 2010 Independent Research Project, University of Leicester, UK

Research Supervisors: Dr Mohammed El-Mezgueldi, Dr. Ralf Schmid

Main Activities:

- Identify adaptations in the troponin functional sites and residues that modulate their functions by applying sequence analysis, molecular modelling techniques and phylogenetic analysis

2009 - 2010 Steered Research Project 2, University of Leicester, UK

Research Supervisors: Dr. Ralf Schmid and Dr Mark Pfuhl

Main Activities:

- Identify whether the given blood sample sequence is an interesting drug target
- Produce a phylogenetic tree showing the relationship to other protein sequences
- Produce the homology model of these proteins in its functional forms, and to identify active site residues, finding structure of similar proteins in the PDB
- Share the analysis online via creation of a website

2009 - 2010 Steered Research Project 1, University of Leicester, UK

Research Supervisors: Dr. Richard Badge and Dr. Eran Tauber

Main Activities:

- Exploring circadian clock genes by data mining of microarray experiments with the extensive use of R-package and Gene Ontology

2003 Master Thesis, Bangalore University & University of Agricultural Sciences

Research Supervisors: Dr. P.Narayanswamy

Main Activities:

- DNA fingerprinting on Open Pollinated Progeny of Mallika (Indian Mango cultivar) by using RAPD markers

### **Professional Research Activities:**

2005 - 2007    Research Trainee, National Research Centre on Plant Biotechnology, New Delhi, India

Mentor: Dr. Aqbal Singh

Main Activities:

- Analyzing genetic diversity and relations between different stains of Rhizobium
- Assessment of molecular diversity among natural isolates of Mesorhizobium ciceri of chick pea.
- Handling of large number of bacterial strains and study of their nitrogen fixing ability by nodulation assay, isolate their genomic and plasmid DNA and PCR amplification
- Further study of the diversity among these isolates using RAPD and RFLP molecular markers

### **Training Courses**

2011 – 2015    completed various eLearning programs:

- Learn to Program: The Fundamentals, University of Toronto (Grade 73.9%)
- Learn to Program: Crafting Quality Code, University of Toronto (Grade 70.0%)
- Computational Molecular Evolution, Technical University of Denmark (Grade: 100.0% with Distinction)
- What a Plant Knows, Tel Aviv University (Grade: 89.9%)
- Web Intelligence and Big Data (Indian Institute of Technology Delhi, Grade: 82.2%)
- Preparation for Introductory Biology: DNA to Organisms, University of California, Irvine (Grade: 73.1% with Distinction)
- Animal Behaviour, The University of Melbourne (Grade: 71.3%)
- Dino 101: Dinosaur Paleobiology, University of Alberta (Grade: 88.3%)

- Bioinformatics: Introduction and Methods 生物信息学: 导论与方法, Peking University (Grade: 88.2%)
- Computing for Data Analysis, Johns Hopkins University (Grade: 86.0%)
- Animal Behaviour and Welfare, The University of Edinburgh (Grade: 82.0%)
- Introduction to Pharmacy, The Ohio State University (Grade: 86.0% with Distinction)
- Programming for Everybody Python, University of Michigan (Grade: 77.0%)

Dec 2008	English and Academic Skills, University of Birmingham, U.K
Aug-Sep 2008	Computer Fundamentals, Core Java Programming, HTML, DHTML, Client Side Scripting with JavaScript, Aptech Computer Education, Faridabad, INDIA
2014	Core Java with Experienced Engineers in IT fields, Faridabad, INDIA.

## EXPERIENCE IN IT

June 2021 [Sonia Singla, Author at Analytics Vidhya](#)

MAR 2019- APR 2019

### FRONT-END DEVELOPER – CSIR

As an intern I am responsible for creating the front-end of the system which is built on Hyperledger Fabric (blockchain technology)

Swasthya Blockchain - DEMO

[https://drive.google.com/file/d/1fyIY2AtDFywuUtOwxpfg\\_9\\_G7D7ZO5LW/view?usp=sharing](https://drive.google.com/file/d/1fyIY2AtDFywuUtOwxpfg_9_G7D7ZO5LW/view?usp=sharing)

JUN 2017 – SEP 2018

### A) GRAPHIC DESIGNER HIMALAYA, UK

- DEVELOP THE OVERALL LAYOUT AND PRODUCTION DESIGN FOR ADVERTISEMENTS, BROCHURES, MAGAZINES, AND CORPORATE REPORTS
- CREATE VISUAL CONCEPTS TO COMMUNICATE IDEAS THAT INSPIRE, INFORM, AND CAPTIVATE EVERYONE WHO COMES ACROSS OUR CONTENT

### B) VIDEO MAKING / EDITING

### C) SOCIAL MEDIA MARKETING

### D) MAKING WEBSITE

JULY 2017 – SEP 2017

**GRAPHIC DESIGNER** AWOHES, INDIA

JUN 2017 – AUG 2017

**WEB DEVELOPMENT** AWOHES, INDIA

## ADDITIONAL EXPERIENCE

SEP 2018 – DEC 2018



### INTERNSHALA WOMAN AMBASSADOR INTERNSHALA

As an Intern I must help many women in (re)starting their career, and building a professional identity for themselves, to inform as many women about 'Internshala' and 'Internships for Women' and encourage them to register on website.

- Creating awareness about the 'Internships for Women' initiative among the women in their network (through offline and online marketing) and help them in (re)starting with their careers through internships. Some of the activities will be performing are social media marketing, conducting FB Live sessions, talking to women of locality, etc.

JUN 2017 – AUG 2017

### HR MANAGER LUDIFU

As an Intern my duty was to select interns for Social Media Marketing and assign them task and give certificates after successful completion of Internship.

- Handling recruitment
- Coordinating with the team
- Providing daily reports to the management

NOV 2011 – APR 2012

### PROJECT SUPPORT ASSISTANT RUGBUGS, U.K

Administrative duties and Business support to marketing a new range of products on website

## EXPERIENCE IN RESEARCH WORK

AUG 2017 – DEC 2018

**RESEARCH** CSIR, INDIA

**DATA SCIENCE IN HEALTH CARE.**

**DATA ANALYTICS- WEB SCRAPPING**

**Examples -**

<https://drive.google.com/open?id=1CiqxB8leaYTSD5OnSORollINCRHA-o4B6>

DEC 2018 – JAN 2019

**Blogging** My Analytics mentor, INDIA

**Examples-**

<https://myanalyticsmentor.com/blogs/why-freshers-find-it-difficult-to-get-data-science-jobs>

<http://myanalyticsmentor.com/blogs/why-data-scientist-job-as-a-carrier>

<http://myanalyticsmentor.com/blogs/mistakes-to-avoid-in-analytics-preparation>

<https://myanalyticsmentor.com/blogs/why-is-julia-a-good-emerging-language-for-data-science>

## PUBLICATIONS

- Impact of Diwali firecrackers on air quality in India and its effect on the health-
- <http://dx.doi.org/10.22376/ijpbs.2019.10.2.b155-169>
- Current status and Data Analysis of Diabetes in India - <https://lnkd.in/dczM8d6>
- Role of yoga for people suffering from Schizophrenia in India. - <https://lnkd.in/dUxMMZG>
- Data Analysis and classification of cardiovascular disease and risk factors associated with it in India.
- Data Analysis and Classification of Cardiovascular Disease and Risk Factors Associated with It in India | SpringerLink
- Fog Edge- [Future Opportunistic Fog/Edge Computational Models and their Limitations](#)
- Cancer- [4 Machine learning: an ultimate solution for diagnosis and treatment of cancer](#)
- AI- [Role of AI in Healthcare](#)
- Ontology - [Role of Ontology in Health Care](#)
- Virtual Reality - [virtual reality in non communicable diseases](#)
- Smart City a change to a new future world- Upcoming Paper in Feb 2022
- Troponin Sequence variation in Health and Disease – **Book**
- COVID-19 THE GREAT EPIDEMIC OF THE YEAR 2020 -**Book**
- AI and IoT in Healthcare - [AI and IoT in Healthcare | SpringerLink](#)

## REFERENCES

- *Er. Aman Choudhary, Managing Director at Amsparx IT Consulting, India (email: [aman.monu@gmail.com](mailto:aman.monu@gmail.com))*
- *Dr Sukant Khurana, Head of Data Science, AI, and Neurophysiology Lab, India (email: [skgroup.iiserk@gmail.com](mailto:skgroup.iiserk@gmail.com) )*
- *Ms. Arifa Khan, Founder of Himalaya Labs and Fintech Storm, U.K (email: [arifa\\_khan@yahoo.com](mailto:arifa_khan@yahoo.com))*
- *Dr Richard Badge, Department of Genetics, University of Leicester, U.K (email: [rmb19@le.ac.uk](mailto:rmb19@le.ac.uk))*
- *Mr Raju Dharna, Bioinformatics Consultant, ETC SPL, Brighton, U.K (email : [rdharna@etcspl.com](mailto:rdharna@etcspl.com))*
- *Dr Ralf Schmid, Department of Biochemistry, University of Leicester, U.K (email: [rs206@le.ac.uk](mailto:rs206@le.ac.uk))*
- *Mr Alex Clay, RugBugs, Birmingham, U.K (email: [info@rugbugs.co.uk](mailto:info@rugbugs.co.uk))*



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in Mathematical Sciences

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Presented to

Ms. Sonia Singla

05 December 2020

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FIRMS India

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