Simran Rohra

To seek an opportunity to utilize the best of my potential and analytical skills; upgrading skills with time by expanding my knowledge which can lead to the company's growth. Good at implementing solutions and proficient in generating and using different pipelines. Always willing to accept challenges, and work collaboratively in areas of genomics, proteomics, and drug discovery.

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EDUCATION

2021 - 2023	**M.Sc Bioinformatics**
	Gujarat University Ahmedabad
	First class with distinction

2018 - 2021	**B.Sc Biotechnology**
	LJ Institute of Applied Sciences Ahmedabad
	First class with distinction

PROJECT

Dissertation from the Department of Bioinformatics, Gujarat University.

Title: "Comparative analysis of anti-microbial resistance genes in *Streptococcus pneumoniae* affected patients"

- WGS data of bacterial genomes were curated from the public database.
- Variants in the bacterial genome were detected that can be responsible for phenotypic behaviors such as resistivity towards drugs.
- From the *de novo* assembled genome, anti-microbial resistance genes were identified and their resistance mechanisms were studied.
- Common genes from all the samples were retrieved, and further their annotation and their involvement in different pathways, which can be targeted to decrease their virulence.

TECHNICAL SKILLS

- Operating Systems: Windows, Linux including command line interface and shell scripts
- MS Office: Word, Excel, PowerPoint
- Programming Languages: R, Python, C
- Methods and Concepts: Next-Generation Sequencing and its data analysis, Comparative genomics, Microarray technology, Genome mapping, De *novo* assembly, Pathway Analysis, Gene Ontology, Phylogenetics, Drug Designing, Molecular Docking, QSAR, ADMET, Drug Target Prediction, Homology modeling, WGS, WES, Variant detection, Functional Annotation
- Tools and Software: Autodock-Vina, SwissDrugDesign, Open3Dtools, Chimera, PyMOL, Clustal Omega, YASARA for energy minimization, SAVES, BLAST, MEGA, GEO2R, KEGG mapper, Protein structure prediction tools
- Data curation using various databases
- Handling of Linux-based command-line tools used for genomics.
- Wet lab techniques: DNA/RNA isolation, Gel Electrophoresis, Microbial culture staining techniques, Thin Layer Chromatography, Biochemical Tests
- Basic Biostatistics

CERTIFICATIONS AND COURSES

- Data Science Course from Next Innovate Techno Solutions (20-5-23 - Present)
- Poster Presentation on "Genome-wide association studies in variant-linked diseases" at Gyanvista National Symposium 2023 (5-2-23)
- Decode Life International workshop on "Data Science and Machine Learning using R" (26-9-22 - 22-10-22)

SOFT SKILLS

- Teamwork
- Problem-solving
- Detail-Oriented
- Adaptabilty
- Analytical Skills

LANGUAGES

- English
- Hindi
- Gujarati