S H R U S H T I S A L U N K E

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SUMMARY : BIOINFORMATICIAN

A dedicated Bioinformatician with hands-on experience in genomics, structural bioinformatics, and machine learning. Skilled in Python programming and web development (HTML, CSS, and basic JavaScript), I transform complex genomic data into clear, actionable insights. Passionate about integrating AI-driven solutions to Biological understanding. Proven ability to quickly learn and apply advanced techniques, with a keen eye for detail and problem-solving. Constantly eager to expand my knowledge and embrace new technologies, making a valuable asset in fast-paced work environments.

TECHNICAL PROFICIENCIES

Languages : Python, R, Perl, Bash, SQL, HTML-CSS

Genomics Tools : fastqc, Trimmomatic, bcftools, samtools, bwa, GATK

Bioinformatics tools and software : BLAST, Expasy tools, Discovery Studio, Cytoscape, SPDBViewer, Cell designer

Databases : UCSC, GWAS, ClinVar, PharmGKB, NCBI dbSNP, Ensemble, Pubmed, UniprotKB, PDB, IMGT, EMBL-ENA

Methods and Concepts :

Pairwise and Multiple sequence alignment algorithms

Various sequencing technologies : WGS, WES, Microarray

Data Science : Large data handling using NumPy, Pandas, Seaborn and Matplotlib libraries

Machine learning concepts : Supervised and Unsupervised machine learning algorithms

Statistical Concepts : Probability data distribution, Hypothesis testing, Correlation coefficients, ANNOVA

Reference guided and denovo genome assembly, differential gene expression.

Software testing : test case designing, database and API testing.

Prompt engineering concepts

PROFESSIONAL EXPERIENCE

GeneArche Wellness Pvt. Ltd. **2024-Present**

Jr. Bioinformatics Scientist

GeneArche Wellness Pvt. Ltd. **July 2024-Sept 2024**

Bioinformatics Intern

EDUCATION

Savitribai Phule Pune University, Bioinformatics Centre, Pune **2022-2024**

MSc Bioinformatics

MES Abasaheb Garware college of arts and science, Pune **2018-2021**

BSc Biotechnology

PROJECTS

- Computational studies on Human Leukocyte Antigen-I peptide T-cell Receptor interactions by developing a machine learning model within the field of Immunoinformatics. – Bioinformatics Centre

  The concepts of immunoinformatics and structural biology were implemented on HLA-I data curated from different databases. Then, using python and machine learning techniques like random forest and support vectors, models were developed and their performance was analysed by statistical concepts of F1 score, Confusion matrix, accuracy.

- Development of the database of anti HSV peptides (ongoing) under the guidance of Dr. Sintu kumar Samanta, Assistant professor , IIIT Prayagraj, Uttar Pradesh, India.

COURSES

ChatGPT Prompt Engineering for Developers 2024

DeepLearningAI

Introduction to data science Jan 2022

IBM, EdX platform

Python for Data Science Jan 2022

IBM, EdX platform

EXTERNAL LINKS

LinkedIn : www.linkedin.com/in/shrushti-salunke 891791197

Github : https://github.com/shrush45

Portfolio Website : https://shrush45.github.io/