David
Franklin

Bioinfo Analyst |Software developer | Microbiologist

EDUCATION

2021-2023

M.Sc. in Microbiology, Manonmanium Sundharanar University | CGPA: 8.29

SOCIALS

[Projects on GitHUB](#)

[Linkedin](#)

COURSES

1. Bioinformatician | Bversity

2. Scientific Computing with Python | freecodecamp.org

3. AI ML in Drug Discovery Training Program | BioTechnika

TECHNICAL SKILLS

BIOINFORMATICS
Molecular Docking, Protein Modeling, NGS, Omnics, Network Analysis, Taxonomic Profiling

Programming Languages: R, Python, PSQL, HTML, CSS, JavaScript, linux Bash

Front-end development Libraries: Reactjs, Flask

Machine Learning: sckitlearn, Tensorflow

PROJECTS

Python Analyst project:

Bioinformatics'' IDENTIFICATION OF TARGET GENES FOR PERSONALIZED MEDICINE IN *PSORIATIC ARTHRITIS* ''

- Conducted a comprehensive analysis to identify potential drug targets for personalized medicine in *Psoriatic Arthritis* (PsA) using publicly available gene expression data.
- Leveraged advanced bioinformatics techniques to analyze differential gene expression profiles between PsA patients' lesional skin and healthy control samples.
- Leveraged **Python libraries** such as Biopython and pandas to process and analyze genomic sequences.
- Employed libraries such as **NumPy, SciPy, Seaborn**, and **Matplotlib** to perform statistical analyses and visualize expression patterns.

[GitHub Documentation](#)

Programming Projects

Scientific Computing with Python

The certification requires building 5 projects:
- **Arithmetic Formatter:** Wrote a function to arrange arithmetic problems. Handled error handling for improper input and different sizes of numbers.
- **Time Calculator:** Wrote a function to add a duration to a start time and return the result. Handled different time formats and leap years.
- **Budget App:** Created a budget app class to manage budgets and check balances. Implemented methods to deposit, withdraw, transfer between accounts, and check balances.
- **Polygon Area Calculator:** Wrote a class to represent a shape and calculate its area. Implemented methods to calculate the area of a rectangle and a circle.
- **Probability Calculator:** Wrote a program to determine the probability of drawing certain balls randomly from a hat. Simulated drawing balls 10,000 times and calculated the probability.

[GitHub Documentation](#)