ABDOULFATAH ABDILLAHI

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PROFESSIONAL SUMMARY

Experienced data scientists and graduate research assistant specializing in machine learning and deep learning applications for genomic data analysis. Proficient in predicting E.coli drug resistance. Actively seeking an internship in data science, software engineer or bioinformatics eager to contribute to and learn from cutting-edge research and development projects in these fields.

EDUCATION

- **Master of Science** in Data Science and Artificial Intelligence (Expected 2025) at State University.
- **Bachelor of Sicence** in Computer Science(2021-2023) at San Francisco State Unversity
- **Associate is Science,** Computer Science (2019-2021) at Northern Essex Community College

WORK EXPERIENCE

Graduate Research Assistan at State University (2023 - Present)

- My research is predicting E.coli Drug resistance by applying advanced machine learning and natural language processing techniques to genomic data.
- Performed extensive data analysis on large genomic datasets, identifying key genetic markers associated with drug resistance, which led to the discovery of novel targets for antibiotic development and informed future research direction.
- Took the initiative to explore and implement new deep learning algorithms, improving the accuracy and efficiency of drug resistance prediction by 15% campared to existing approaches, demonstrating a strong problem-solving ability and dedication to innovation.

Discussion Leader / Grader (Feb 2024 - May 2024)

- Facilitated and led discussions for CSC 219 and CSC 101, supporting 25 students by providing expert guidance and academic support, enhancing their understanding and application of Python and Java in data science and computing, respectively leading to a 15% improvement in class performance.
- Took initiative to mentor and support students, resulting in successful project completion for all 25 students.

Intern Bioinformatics at Genentech (June 2023 - Sep 2023)

- Analyzed the performance of the existing model and identified the need for enhancements to improve efficiency and computational speed
- Collaborated with a team of data scientists to implement CPU parallelization techniques within the xgbse algorithm to distribute the training process across 12 CPU cores.

Project Experience

Technical Lead - Chat-Slang project (Jan2024-May2024) - chatSlang

- Developed a synthetic text generation function to create artificial samples for training machine learning models, addressing the challenge of insufficient data availabiliy.
- Implemented and compared two machine learning models–Logistic Regression and Random Forest–to classify text formality based on the use of abbreviations, achieving accuracy scores of 92% and 96% respectively.

Full-Stack Developer - Educlouds App (Jan 2024 - May) - Educloud

- **Fron Development:** Designed and implemented the user interface using modern web technologies, ensuring seamless and accessible experience for students to engage with the platform
- **Backend Development:** Built backend services using Flask, SQLALCHEMY, and Python; developed and maintained APIs that handle data transactions and integration with external computational resource providers.

Visualization Project - Data-Visualization

- Designed a function to generate a bar chart illustrating average purchase amount based on age

and gender, and categorized gender data into three segments: male, female and both to allow specific gender related data visualization.
- Structured and interconnected code files for team integration and operational efficiency.

Presentation: Poster

- **Abdoulfatah Abdillahi**, Estefanos Kebebew, Gian Carlo L. Baldonado, Juvenal F Barajas, Myco Torres, Andrew Scott, MS, Anagha Kulkarrni, PhD. Ilmi Yoon, PhD., Pleuni Pennings, PhD. Predicting E.coli Drug Resistance through Different Deep Learning-Based Approaches using in Comprehensive Pan-genome Assembly. Poster presenting at The Allied Genetics Conference, Metro Washington, DC.

Technical SKILLS

- **Programming Language:** Python(Proficient), Java(Intermediate), C++, JavaScript, HTML, CSS
- **Frameworks & Libraries:** React, Node.js, Pytorch, Keras, TensorFlow, Express, Flask, Docker file
- **Cloud & DevOps:** Google Cloud, experience with high-performance computer clusters (Slurm)