# SHANTANU FUKE

## Education

# Texas A&M University Kingsville

Master of Science in Computer Science

August 2023 - May 2025

Kingsville, Texas

## Coursework

- Artificial Intelligence (AI)
- Database Systems
- Analysis of Algorithms
- Operating Systems
- Cloud Computing

# Experience

## Texas A&M University Kingsville

• Application of Neural Networks

Jan 2024 – Present

Kingsville, TX, USA

Research Assistant

- Designed and implemented neural networks for DNA enhancer prediction, achieving a 20% increase in prediction accuracy.
- Developed a C++ tool to determine sequence similarity, reducing computation time by 40% and increasing similarity measurement accuracy by 10%.
- Automated the data pipeline using Python, reducing manual processing time by 40%.
- Utilized Python for data preprocessing, transforming large FASTA files into neural network-compatible formats, boosting model accuracy by 15%.

### Deloitte Consulting Private Limited

Oct 2021 - Jul 2023

Oracle Retail Developer

Pune, India

- Automated data transfer from Google Cloud Platform to Oracle RMS with PL/SQL, reducing upload time by 40%.
- Developed an integration between **Oracle RMS and SAP ERP** to automate **invoice processing**, boosting workflow efficiency and **improving data accuracy by 60%**.
- Developed "Deals to Stock Ledger Interface" in PL/SQL, optimizing deal processing and ensuring data integrity for large volumes.
- Led the design and implementation of Oracle Retail Cloud location list creation program, cutting manual creation time by 70% and mentoring team members with Shell scripting expertise.

## Tata Consultancy Services Ltd.

Apr 2019 - Oct 2021

Oracle PL/SQL Developer

Pune, India

- Developed a PL/SQL program to migrate 80% of Coupa purchase orders to Oracle E-Business Suite, automating data transfer and saving 20 hours weekly in manual entry.
- Automated Supplier Invoice Management in Oracle E-Business Suite with PL/SQL, resulting in an 80% increase in data accuracy and 60% reduction in processing time.
- Reduced user creation time by 60% with custom PL/SQL solutions that automated account creation and provided email notifications to users in Oracle E-Business Suite.
- Developed and maintained **Oracle Forms and Reports**, utilizing strong debugging skills to resolve complex issues and enhance system performance.

### **Projects**

## Facebook Clone Project | Python, Django, JavaScript, HTML, CSS

October 2024

• Developed a social networking platform with Django, featuring user registration, secure authentication, profile management, and real-time updates for posts, comments, and likes via AJAX, along with a friend request system, notifications, real-time chat using WebSockets, and responsive design for cross-device compatibility.

## Lung Cancer Sub-Classification Using Deep Learning | TensorFlow, Keras, Python

May 2024

• Developed a CNN model to classify non-small cell lung cancer images into squamous cell carcinoma and adenocarcinoma using the LC25000 dataset. Utilized TensorFlow and Keras for model building, training, and evaluation, achieving 98% accuracy on the test set with three convolutional layers, max-pooling, and dense layers.

## DNA Promoter Classification Using Deep Learning | Keras, TensorFlow, Python

Jan 2024

Developed a CNN model using Keras and TensorFlow for classifying DNA promoter sequences, achieving 89% test accuracy.
Processed two datasets of promoter and non-promoter sequences, ensuring data cleanliness and proper encoding for effective CNN training. Evaluated model performance through metrics including test loss, accuracy, classification report, confusion matrix, and ROC curve, allowing for comprehensive analysis and refinement.

#### Skills

- Programming Languages: Python, Java, C++, PL/SQL
- Web Development: HTML, CSS, Django, Bootstrap
- Databases: Oracle, MySQL, PostgreSQL, MongoDB
- Version Control: Git, GitHub, GitLab
- DevOps Tools: Docker, Kubernetes, CI/CD Tools (GitHub Actions, Jenkins)
- Cloud Platforms: AWS, Google Cloud Platform (GCP)
- Machine Learning & Data Analysis: TensorFlow, Scikit-learn, Pandas, Matplotlib
- ETL Tools: Apache Spark, Apache Airflow