Kanishkha Jaisankar

 jkanishkha0305 | jkanishkha | jkanishkha0305.github.io | jkanishkha0305@gmail.com | +971 561964863

EDUCATION

BIRLA INTITUTE OF TECHNOLOGY AND SCIENCE
BACHELOR'S OF ENGINEERING IN COMPUTER SCIENCE
Expected Sep 2023 | Dubai, UAE

CHETTINAD VIDYASHRAM
Higher Secondary Education
March 2019 | Chennai, India

COURSEWORK

UNDERGRADUATE
- Data Structures & Algorithms
- Theory of Computation
- Design & Analysis of Algorithms
- Foundations of DataScience
- Machine Learning
- Artificial Intelligence
- Deep Learning

SKILLS

PROGRAMMING
- **Languages:** Python | C++ | C | Java
- **Web Technologies:** HTML | CSS Django | Flask
- **ML/AI:** TensorFlow | PyTorch | Keras Scikit-learn | OpenCv | NLTK
- **Data Analytics:** Numpy | Pandas Matplotlib | Seaborn | Plotly |
- **Cloud Platforms:** AWS | Azure | GCP
- **Miscellanous:** Docker | Linux | ROS Git | Scrapy | Huggingface | Arduino

PUBLICATIONS

"Classification of Microstructure Images of Metals Using Transfer Learning."
MDIS 2022 8th International Conference, Sibiu, Romania, Springer 2022. (Published)
doi: 10.1007/978-3-031-27034-5

"An End-to-End Hybrid Learning model for detection of Covid-19 from Chest X-ray images".
ATCON-1-ICAIA-2023, Bengaluru, India. (Presented & Accepted)

"Multi-model approach for autonomous driving: A comprehensive study on traffic sign detection, vehicle detection, lane detection, and deep learning in Udacity Self-Driving Car Simulator".
Multimedia Tools and Applications, An International Journal, Springer 2023. (Under Review)

KPTAC TECHNOLOGIES | SOFTWARE ENGINEERING INTERN
Feb 2023 – Jul 2023 | Dubai, UAE
- Performed Web Scraping of e-commerce data from various websites like Carrefour, LuLu, Waitrose using Scrapy framework and from hidden Api clients.
- Designed and implemented spiders, item pipelines for automated data extraction, parsing and storing using Scrapy.
- Performed Data cleaning, Preprocessing and Data Analysis on cleaned data.
- Tech Stack: Scrapy, PowerBI, Qlik, Pandas, NumPy, Matplotlib, Postgres

SENTIENT LABS | ROBOTICS ENGINEERING INTERN
Jun 2021 – Aug 2021 | Dubai, UAE
- Developed ROS program in AWS RoboMaker for path planning.
- Ran robotic simulation tests with Turtlebot using ROS, Gazebo, Rviz.
- Deployed the application to edge device using AWS Greengrass IOT and established a ROS pipeline using AWS.
- Containerized the robot application with Docker for improved portability.
- Tech Stack: ROS, AWS Robomaker, Docker, AWS Greengrass, Arduino

PROJECTS

STUDENT PERFORMANCE ANALYSIS : | END-TO-END ML PROJECT
Mar 2023 – Apr 2023 | Dubai, UAE
Performed EDA, FE, PCA on student dataset. Trained the model using **XGBregressor, CatBoost Regressor, AdaBoost Regressor, Gradient Boosting, Random Forest** and performed hyperparameter tuning. Built and end-to-end model using **Flask** and deployed the model using **AWS Beanstalk** and **AWS codepipeline**.

VISUAL TRACKING OF MOBILE ROBOTS USING UAV :
Aug 2022 – Dec 2022 | Dubai, UAE
Created custom datasets of Turtlebot robot using **Roboflow** and trained the datasets using **Faster RCNN, SSD YOLOv5, YOLOv7**. Used PID controller, Neural Network and OpenCv techniques to make the Dji tello drone track & follow the Turtlebot.

FETAL HEALTH PREDICTION USING ENSEMBLE LEARNING :
Aug 2022 – Nov 2022 | Dubai, UAE
Performed EDA, FE & PCA on the **CTG** dataset. Performed **ensemble learning** using bagging, boosting techniques and ML models **XGBoost, Adaboost, RandomForest, Hybrid CNN+LSTM** were used to train and perform comparative analysis.

ACHIEVEMENTS

Year		
2023	Finalist	BITS Innovation Challenge, CIIED
2023	Winners	Dubai World Police Summit Drone Challenge, UAE
2023	Top 10	Emirates Robotics Competition, Dubai Future Foundation
2022	Top 20	All over Arab nations, ITAS Arab Youth Competition, Qatar
2022	Winners	Desert Hack Hackathon, PIEDS CEL
2020	Winners	Capture the Flag, ACM BPDC
2020	Runner-Up	CodeBlitz, MTC BPDC
2019	Scholarship	Academic Scholarship for scoing 9+ GPA in continous semesters

CERTIFICATIONS

Apr 2023	Self-Driving Car Specialization		*University of Toronto*
Mar 2023	Deep Learning Specialization		*DeepLearning.Ai*
Mar 2023	Machine Learning Specialization		*DeepLearning.Ai*
Sep 2023	IBM DataScience Specialization		*IBM*
Aug 2023	Google Data Analytics Specialization		*Google*