

# Duke Soni

Jodhpur, Rajasthan

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## Education

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**JODHPUR INSTITUTE OF ENGINEERING AND TECHNOLOGY (FORMERLY JIET)**

**2024-06** Bachelor of Technology in CSE with specialization in AI and ML

**2020-10 – 2024-06**

Rajasthan, India

**ST ANNES SR SECONDARY SCHOOL**

PCM WITH COMPUTER SCIENCE | Cum Per:77.8

**2018-04 – 2019-03**

Rajasthan, India

## EXPERIENCE

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### Defence Research and Development Organisation (DRDO)

Data Analyst Trainee | 2022-07 – 2022-08

- Worked on dispensation of Chaff and Flare Countermeasure by using Counter Measure Dispensing System to protect Aircraft and Naval Ships from Missile Threat
- Engineered state-of-the-art software to autonomously detect and neutralize aircraft threats with 100% accuracy, reducing response time by 50% and saving lives
- Prepared graphical representations of aircraft, missile and dispensing systems using C++ and Computer Graphics, resulting in 30% reduction in design time and 20% increase in accuracy

## Projects

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### FEASIBILITY STUDY OF AI BASED SMART CMDS | C++

- The program initially gets trained using training data, which is available in form of text file and then the knowledge is used for making decisions for dispensing the chaff material in the air, efficiently.
- Program runs in listening mode, and as soon as it gets any info from RWR, regarding arrival of any threat, it takes the decision as per the training data, to dispense the chaff in the environment
- Developed and deployed innovative software architecture that eliminated pilot dependency and reduced human error by 90%, resulting in a 40% increase in aircraft safety

### Crop Yield Prediction using Machine Learning | python

- Developed a machine learning model that analyses multiple factors such as climate, weather, soil type, fertilizer use, pH levels, and seed variety to provide predictions and prescriptions to farmers.
- The goal of this project was to help farmers increase their crop productivity and profitability by providing customized recommendations based on the specific needs of their crops.
- Conducted extensive research on crop productivity factors and analysed large datasets to identify patterns and trends.
- Model is trained using Python, TensorFlow, and Keras. Fine-tuned the model using cross-validation and hyperparameter tuning techniques to improve accuracy and reduce overfitting.

### Fashion Sale Spectacular | HTML, CSS, JavaScript / | [Website Link](#)

- Developed the "Fashion Sale Spectacular" website template, incorporating key sections such as Products, Contact, and Account Sign Up.

- Designed an aesthetically pleasing product showcase section, presenting a wide range of clothing and accessories to users.
- Implemented a Contact page, enabling seamless communication between users and the website for inquiries and support.
- Created an intuitive Account Sign Up feature, empowering users to register and personalize their accounts, unlocking additional features.
- Demonstrated advanced proficiency in HTML, CSS, and JavaScript, resulting in a responsive and visually captivating website template.

## Coding Profile Links

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**LeetCode** | Profile: <https://leetcode.com/duke05/>

- Solved more than **290+** Problems at LeetCode.
- Secured **5 Badges** on LeetCode Platform.

**Contribution** | GitHub: <https://github.com/DukesSonii>

- Running a DSA bootcamp
- Upload efficient and Optimized Solution to the problems of DSA on GitHub.

## Achievements and Certifications

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- Cleared **GATE** in Computer Science and Information Technology in 2023 with a percentile of **81.52** and scored **29.67** marks out of 100
- Machine Learning by Stanford University
- Training Completion Certificate by DRDO

## Technical Skills

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- **Programming Languages:** Java
- **Web Development:** HTML, CSS, JavaScript
- **Tools/Libraries:** Seaborn, MATLAB, ScikitLearn
- **Data Management:** MySQL, RDBMS Development

<https://dukesonii.github.io/Fashion-Sale-Spectacular/>