

#### EDUCATION

# SRM Institute of Technology

Bachelor of Technology in CSE (Data ), Current CGPA: 9.50

- Present

Class 10<sup>th</sup>, Percentage: 92.8

Class 12<sup>th</sup>, Percentage: 92.8

## EXPERIENCE

# Data Analyst Intern

Zidio Development Remote

- Engineered a segmentation model using deep learning techniques to categorize large datasets, yielding actionable business insights.
- Employed convolutional neural networks (CNNs) and advanced algorithms, enhancing segmentation model accuracy by over 35%.
- Applied data augmentation strategies to bolster model robustness across diverse datasets.
- Collaborated with cross-functional teams to successfully deploy the segmentation model in production environments.

### Research Intern

Remote

- to develop a real-time illegal trash dumping detection system. • Collaborating with Prof.
- Utilizing OpenPose for pose estimation in to identify illegal trash dumping activities with high precision.
- Designed and deployed a multi-class classification model to differentiate between various types of dumping actions, achieving a detection accuracy improvement of over 40%.
- Incorporated real-time video processing pipelines, reducing detection latency by 20% for immediate response systems.
- Leveraged neural networks, combined with object detection and motion tracking, to enhance the detection framework's accuracy and efficiency.

### Projects

### SecureSky AES: Advanced Encryption for Secure Drone Communication

- Facilitated an Advanced Encryption Standard (AES) algorithm in to secure file transfers in drone communication.
- Ensured data integrity and confidentiality, maintaining secure links in drone operations.
- Implemented AES with a key size of 256 bits, enhancing security by over 128% compared to 128-bit encryption, making it resistant to brute-force attacks.

# ChromaGenius: Deep Learning Image Colorization

Python, GANs

- Trained a deep learning model for image colorization using Generative Adversarial Networks (GANs).
- Executed adversarial training, enabling the generator to produce realistic colorizations of grayscale images.
- Achieved high-quality results by refining the model through iterative training, enhancing performance by 20%.

### ParentalEye: Communication App for Pregnant Women

Flutter, Firebase

• Developed a user-friendly mobile app facilitating seamless communication between pregnant women and healthcare providers, increasing user engagement by 50%.

- Integrated appointment scheduling, medication reminders, and emergency contact options, resulting in a 35% reduction in missed appointments.
- Leveraged Flutter for cross-platform development and for backend support, ensuring secure real-time data synchronization and 90% app uptime.
- Enhanced patient satisfaction and healthcare accessibility, with over 75% of users reporting improved communication with healthcare providers.

## Document AI: PDF Data Extraction

Layout LLM Model

• Engineered a PDF data extraction system utilizing the Layout LLM Model

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- Presented findings and advanced to the finals of a competitive showcase.
- Automated the extraction of structured data from unstructured documents, improving processing efficiency by 40%.

# Peer-to-Peer Platform

Database, Python, Blockchain

- Constructed a decentralized platform for peer-to-peer energy trading using blockchain technology, reducing transaction costs by 30%.
- $\bullet$  Designed a secure transaction system facilitating energy exchange between producers and consumers, improving trading efficiency by 25%.
- Developed smart contracts to automate trading processes, increasing transparency by 40% and reducing manual intervention.
- Integrated real-time analytics tools, optimizing energy usage patterns and enabling users to reduce energy costs by up to 15%.

#### CERTIFICATIONS

AI ML AICTE Virtual Internship

NPTEL Python for Data Science (Top 2%)

NPTEL Programming in Java

View Credential

Research Paper on Accident Detection (Yet to be Published)

## Technical Skills

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS, R

Frameworks: React, Developer Tools: Git, Cloud, Cloud Platform, Cloud Platform, Visual PyCharm

Libraries: pandas, NumPy, Matplotlib, OpenCV, Scikit-learn, TensorFlow, Keras, PyTorch, SciPy, Plotly

Competitive Skills: Competitive Programming (Codeforces 1300)