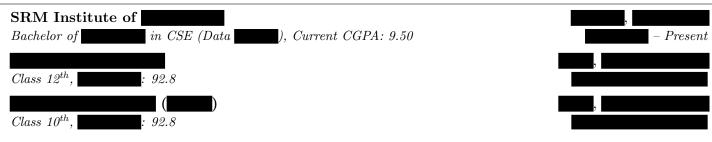
EDUCATION



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

- Collaborating with Prof. to develop a real-time illegal trash dumping detection system.
- Utilizing OpenPose for pose estimation in C++ 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%.
- \bullet 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.

Mobile App Developer

SRM Hospitals SRM Hospital

• Developed a mobile application aimed at enhancing patient-hospital communication, particularly for pregnant women, by providing direct access to healthcare services and support.

- Integrated real-time features such as appointment scheduling, medication reminders, and emergency contact options, resulting in a 35% reduction in missed appointments and better patient adherence.
- Utilized Flutter for cross-platform app development and Firebase for secure backend data management, achieving a 90% app uptime and ensuring data synchronization.
- Collaborated with healthcare providers to optimize user experience, leading to a 50% increase in user engagement and a reported 75% improvement in communication satisfaction from users.

Projects

Accident Detection Using Machine Learning and CNN

Python, VGG19, InceptionV3

- Published a paper on an accident detection framework using machine learning and convolutional neural networks (CNN) for real-time video analysis.
- {Utilized a large dataset to train the model, achieving high accuracy in identifying potential accident scenarios in real-time.
- Combined object detection and motion tracking techniques to accurately detect accident events in various environments. .
- Optimized the model to function effectively within limited processing constraints, enhancing real-time applicability.

| Trained a deep learning model for image colorization using Executed adversarial training, enabling the generator to produ | Adversarial Networks (GANs). ce realistic colorizations of grayscale images. |
|--|--|
| Achieved high-quality results by refining the model through ite Reduced training time by 25% through model optimization | rative training, enhancing performance by 20%. |
| Document AI: PDF Data | |
| • Developed a PDF data system using from un documents. | for accurate, data |
| Automated workflows, achieving a 40% increase in Advanced to the finals in a competitive showcase, highlighting relevance. | · · · |
| • Optimized speed by implementing the document parsing time by 20%. | gmented (RAG) technique, improving |
| Market System Designed a deep learning-based stock market system prices and forecast trends. | Python,, nusing models to analyze stock |
| • Implemented a pipeline for data pre- accuracy improvement of 30%. | <u> </u> |
| | odel architecture and hyperparameter tuning. |
| Constructed a decentralized platform for peer-to-peer energy to transaction costs by 30%. | Database, Python, rading using reducing |
| • Designed a secure transaction system facilitating energy exchantrading by 25%. | |
| • Developed smart contracts to automate trading processes, intervention. | transparency by 40% and reducing manual |
| • real-time analytics tools, energy usage pure to 15%. | atterns and enabling users to reduce energy costs by |
| CERTIFICATIONS | |
| Google AI ML AICTE Virtual | View |
| NPTEL Python for Data Science (Top 2%) | View |
| NPTEL Programming in Java | View |
| Altair Data Science Virtual (AICTE) | View |
| Meta Hacker's Cup | View |
| Intel Unnati Lab | View |
| AWS Skill Builder Machine Learning | View |
| Research Paper on Accident Detection | |
| TECHNICAL SKILLS | |
| Languages: Java, Python, C/C++, SQL, Flutter, React, Angular.js Developer Tools: Git, Firebase, Google Cloud Platform, Libraries: Pandas, NumPy, OpenCV, Scikit-learn, Competitive Skills: LeetCode (1568), Competitive Programming (1988). | , Keras, PyTorch, SciPy, Plotly |

ChromaGenius: Deep Learning Image Colorization

Python, GANs

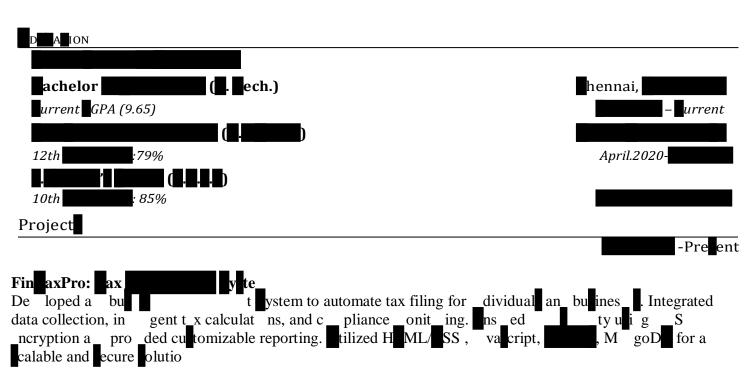
| PROFESSIONAL SUMMARY | |
|---|--|
| I am a skilled Full Stack Web Experienced in building sy end frameworks (FastAPI, top rankings in the ship. Pro%fcient in | Developer and Embedded with expertise in web and IoT projects. from scratch, I specializ development (React, React Native), back-), and embedded programming (Arduino, ESP32). Notable achievements include ngapore, showcasing my problem-solving and technical leader- , and AWS, I am dedicated to creating practical, impactful solutions. |
| CORE COMPETENCIES / SKI | LLS |
| • Front-End Development: | React, React Native, Tailwind CSS |
| • Back-End Development: | |
| • Database | |
| • Embedded Systems: C/C- | ++ for Arduino, ESP32 |
| • Tools and Platforms: Dock | ser, (EC2, (EC), (EC2, (EC), (EC), (EC2, (EC), (|
| • Skills: Problem | n-solving, Team |
| ACHIEVEMENTS | |
| • 1st Position – | Hackathon, |
| • 1st Runner Up (2nd Position | on) – |
| • 2nd, 4th, and 5th Positions | |
| • All Rank 11 – DD | 2023 |
| • 2nd Runner Up – | Hackathon, |
| | |
| design and development o orated with a multidiscipli | Robotics),,,, |
| PROJECTS | |

LEADERSHIP VOLUNTEER

ESP32, RFID sensors

• Technical Team Leader Experienced in task delegation and team coordination, ensuring effective collaboration in technical projects. Led multidisciplinary teams from ideation to testing phases.

 Home Automation System Built a home automation system using Home Assistant and ESP32 modules for remote control of lights, appliances, and door locks with RFID tags. Technologies Used: Home Assistant,



ColorCraft: AI-Driven Image Colorization

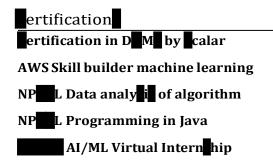
Developed and trained an AI model for image colorization using a Generative Adversarial Network (GAN). The model features a generator that colorizes grayscale images and a discriminator that distinguishes between generated and real color images. Through adversarial training, the system produces vibrant and realistic colorizations, achieving high-quality results.

WeatherWile: Real-lime Weather API Integration

Integrated a eal-time eather API into a website to provide u er with accurate and up-to-date weather information. Implemented features such as location-based we h updates, forecasts, and weather alerts. Insured a responsive and user-friendly interface for seamless access to weather data.

: fficient Order erving Application

Designed and developed a treamlined order erving application utilizing the First-come-First-erve (FFF) algorithm. The application e ciently manage and processes customer order in the order they are received, optimizing the order fulfillment process for enhanced customer attraction and operational e ciency.



 $T\mathsf{ECHNICAL}\,S\mathsf{KILLS}$

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS,
Frameworks:

Developer Tools:
Libraries: pandas, NumPy, Matplotlib,