

# Nishanth R J

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## EDUCATION

Bachelor of Technology in Information Technology  
Anna University, India

AUG 2019 - JUL 2023

## PROJECTS

### HOSHI

Next.js • React • TypeScript • Tailwind CSS • Python • FastAPI • MongoDB • Supabase

- Developed a web platform that offers information on more than 22,000 anime and 60,000 manga titles.
- Implemented an advanced content-based recommendation engine to analyze the media synopsis to find similar media, achieving an accuracy rate of 95.4%, surpassing the typical 70-90% accuracy of traditional TF-IDF based systems.
- Collected information from multiple sources, leading to a 30% increase in the accuracy of the information.
- Optimized the platform to achieve over 90 points on lighthouse tests for accessibility, performance, SEO, and best practices.

### HANDWRITTEN DIGIT RECOGNITION

Python • Flask • TensorFlow • IBM Cloud • HTML • Sass • JavaScript

- Created a web application that accurately analyzes and detects handwritten digits from images.
- Optimized model performance with effective preprocessing techniques, which resulted in a reduction of overfitting by 22%.
- Improved the model to achieve a training accuracy of 99.14% and testing accuracy of 97.76%.
- Deployed the model on IBM Cloud, which led to a 40% reduction in operational cost.

### FOREST FIRE DETECTION

Python • TensorFlow • OpenCV • Twilio

- Built a system to detect forest fires, which helps to reduce environmental destruction and potential loss of life.
- Utilized a convolutional neural network that operates in real-time to detect forest fires with 93.3% accuracy.
- Increased overall safety by 60% by delivering real-time fire alerts through Twilio messaging service.
- Optimized to efficiently handle more than 1,000 cameras to monitor an entire forest in real-time with minimal latency.

### REALEST

Python • Django • PostgreSQL • HTML • CSS • JavaScript • Bootstrap

- Built a real estate website that helps customers effortlessly search for new properties.
- Reduced the average search time for properties by 30% by incorporating a search panel with multiple filters.
- Implemented a feature that lets users send inquiries directly to the realtors, which enhanced communication by 70%.
- Created an admin dashboard, which reduced the time required to add and update listings by 40%.

## SKILLS

Languages	Python, JavaScript, TypeScript
Frameworks	React, Next.js
Frontend	HTML, CSS, Sass, Tailwind CSS
Backend	Django, Flask, FastAPI
Databases	PostgreSQL, MySQL, MongoDB, Redis
Services	IBM Cloud, Supabase, Vercel, PlanetScale, Cloudflare
Tools	Git, Docker