



# DARSHAN NAYAK

AI Engineer | Data Scientist | ML Engineer

## CONTACT ME

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## EDUCATION

MIT World Peace University, Pune  
Integrated B.Tech  
Computer Science & Engineering (AI & Data Science)  
2023 - present

BK Birla Centre of Education, Pune  
Secondary Education (Grade 9 - 10)  
2021-2023

British International School of Phnom Penh  
Primary & Middle School (Kindergarten - Grade 8)  
2010-2021

Global Indian International School, Singapore  
Primary School (Grade 2 - 3)  
2014-2016

## SKILLS

- Python
- JavaScript
- React.js & Node.js
- Machine Learning & Deep Learning
- Computer Vision
- TensorFlow & Hugging Face
- Large Language Models (LLMs) & RAG
- Full-Stack Development
- Data Science & Analytics
- Git & Version Control

## ABOUT ME

AI Engineer & Full-Stack Developer with experience building AI applications, automation systems, and scalable web platforms. Skilled in Machine Learning, Computer Vision, IoT, React, Node.js, Python, and TensorFlow. National-level award recipient recognized for innovative AI-driven solutions and technical leadership.

## RECENT PROJECTS

### ReMotion - AI-Powered Physiotherapy & Fitness Assistant

AI-powered physiotherapy platform utilizing computer vision and pose estimation to deliver real-time posture correction, exercise guidance, and personalized remote rehabilitation with progress tracking and recovery analytics.

### GraphMind - Dual-Layer KG for Implication-Aware AI Memory

Developed a novel AI memory and retrieval framework that mitigates Contextual Tunneling using a shared Concept Influence Graph for cross-domain reasoning, achieving 22-28% higher retrieval precision and 67% lower context usage than baseline architectures. Research published in an academic paper.

### PolePosition - Formula 1 race prediction system

Developed an AI-powered Formula 1 race prediction system using stacking ensembles, Attention-LSTMs, and real-time FastFI telemetry to predict race outcomes, pit strategies, and lap times with 85% accuracy.

### SAHS RAG - Self-Adaptive Hybrid Search RAG

Developed a Self-Adaptive Hybrid Search RAG system leveraging LLM-based query routing, Dense Vector Search, BM25 retrieval, and Cross-Encoder reranking to dynamically optimize retrieval strategies and improve search relevance and response accuracy.

## RECENT ACHIEVEMENTS

- 1st Place - VIT Code Apex 2.0 National Hackathon (Vishwakarma Institute of Technology)** - Secured top position among 2,800+ participants as a solo competitor in a 24-hour national hackathon, evaluated by industry judges from Google and Figma.
- 1st Place - Pragyantara National HacAkathon (MCOE)** - Awarded first place among 800+ participants, demonstrating technical excellence and competitive problem-solving at a national level.
- 3rd Place - National Project Expo (Symbiosis Institute of Technology)** - Recognized for innovative engineering and technical leadership among thousands of national-level participants.
- 3rd Place - TechFiesta InC, Impetus & Concepts (Pune Institute of Computer Technology)** - Awarded for outstanding technical innovation and solution design among 2,400+ participants across India.

## WORK EXPERIENCE

Software Developer VSQC | January 2026 - February 2026

Contributed to the design and development of a scalable software application within a professional team environment, delivering solutions aligned with business requirements.

Freelance Web Developer at Scale Socials, Nayak Fishland & Other Clients | 2024 - Present

Designed and developed responsive, user-focused websites for multiple businesses, delivering end-to-end web solutions covering UI/UX design, frontend development, and deployment.