



A.V.C. COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai
Accredited by NAAC with 'A' Grade | An ISO 9001:2015 Certified Institution

Mannampandal, Mayiladuthurai District, Tamilnadu-609305



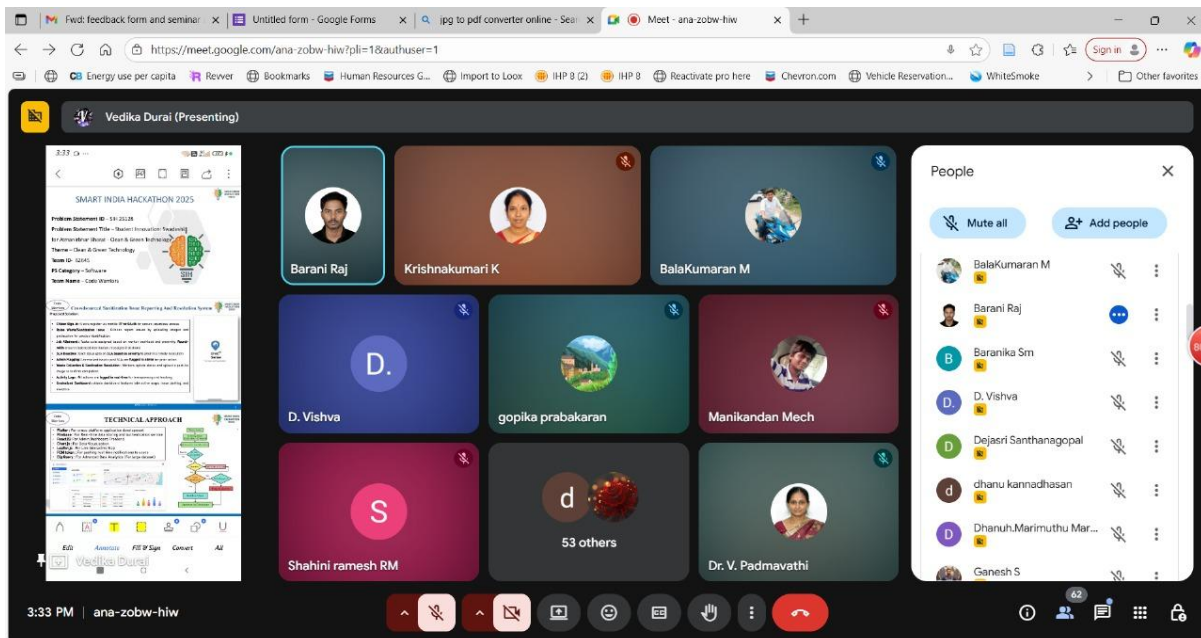
DEPARTMENT OF INFORMATION TECHNOLOGY

Report on WEBINAR

SIH 2025: Cracking the Code of Innovation

The Department of Information Technology, A.V.C. College of Engineering, Mannampandal, in association with the Institution's Innovation Council Cell and the Industry Institute Interaction Cell, organized a webinar on "SIH 2025: Cracking the Code of Innovation" on 28th September 2025 at 03:00 p.m. The session was exclusively arranged for our SIH Team Members and was delivered by our alumnus **Er. B. Baraniraj** (Batch: 2018–2022), currently serving as Member of Technical Staff at Athena Health, Chennai.

Photos



TECHNICAL APPROACH

Tech Stack

- Tailwind
- CSS
- django
- React
- JS
- HTML
- PyTorch
- LLM

Core Machine Learning

Model Type: A pre-trained Custom Decision Tree.

Purpose: Predicts the most suitable academic stream, course, and career path based on a user's interests.

Mechanism: Uses a large set of curated, weighted questions to guide the decision-making process through the tree's nodes.

Technology Stack: Implemented in Python with a high-performance C++ backend for efficient model training and fast inference.

Output: Provides two distinct potential outcomes, offering users multiple pathways to consider.

Dataset

Primary Data: The quiz questions are carefully prepared by an in-house team.

Secondary Data: Additional data is collected from publicly available college and career resources.

Collection Method: Scrapy & other web-scraping frameworks are used to gather data.

Technology Flow

Student → LOGIN → Parents

Quiz → Courses → Materials → Nearby Colleges → Entrance Exam → Scholarship → AI Chatbot → Consultant Services

Smart India Hackathon 2024

Participants: Dhanuh.M., R.V.KARTHIKRI..., Logesh Ra..., Barani Raj, Krishnakumari K, Vedika Durai, Dr. V. Padmavathi, 56 others.

IMPACT AND BENEFITS

Hydro warriors

- *70-85% conceptual understanding through games.
- *Fun and educational gameplay.
- *50-75% gain in technical skills.
- *55-70% behavioral change towards sustainability.
- *Promotes environmental responsibility.

Smart India Hackathon 2024

Participants: Oviya, Krishnakumari K, Sushmitha C.S, D. Vishva, 62 others, Dr. V. Padmavathi.

KEY FEATURES & UI

Key Features

- AI Quiz
- Courses
- Materials (Categorized)
- Career guidance
- Chatbot
- Scholarship and Entrance exam

AI Quiz flow

Quiz → Courses → Materials → Career guidance → Scholarship and Entrance exam

Smart India Hackathon 2024

Participants: Dhanuh.M., R.V.KARTHIKRI..., BalaKumaran M, Barani Raj, Krishnakumari K, Vedika Durai, Dr. V. Padmavathi, 54 others.

Glimpses of the Webinar