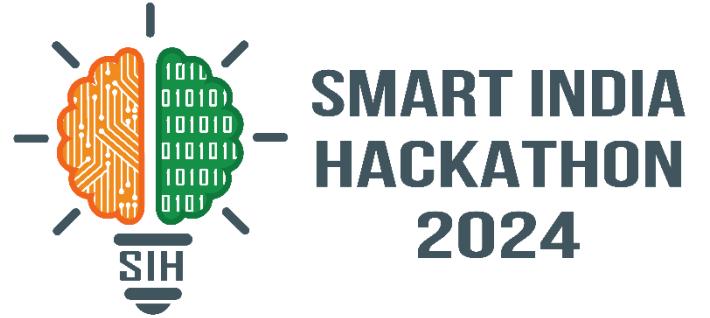
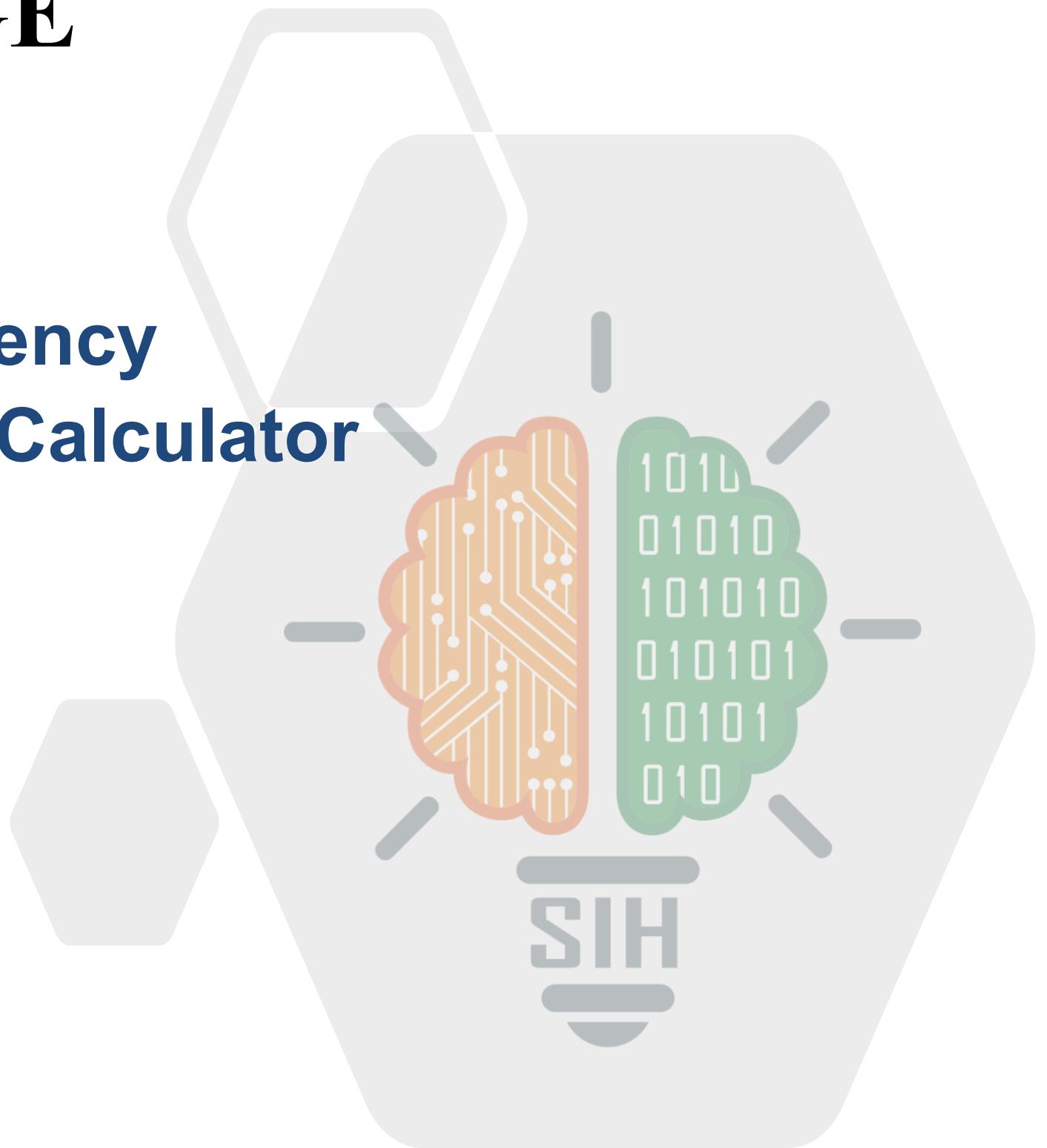


SMART INDIA HACKATHON 2024



TITLE PAGE

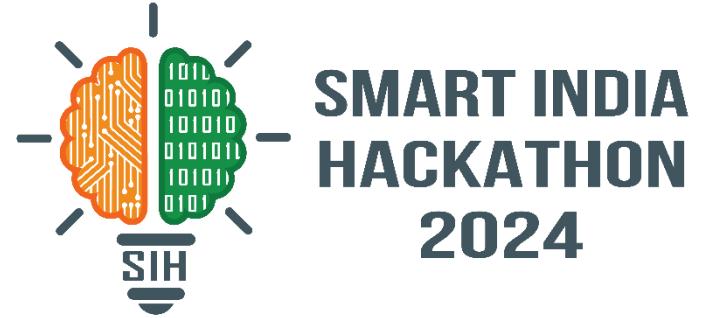
- Problem Statement ID – **SIH1628**
- Problem Statement Title – **Smart Competency Diagnostic and Candidate Profile Score Calculator**
- Theme – **Smart Education**
- PS Category – **Software**
- Team ID – **6214**
- Team Name – **Tech Designers**



TECH
DESIGNERS

IDEA TITLE

AI-Smart Resume Analyzer & Give Skill Gap Solutions for Career Growth

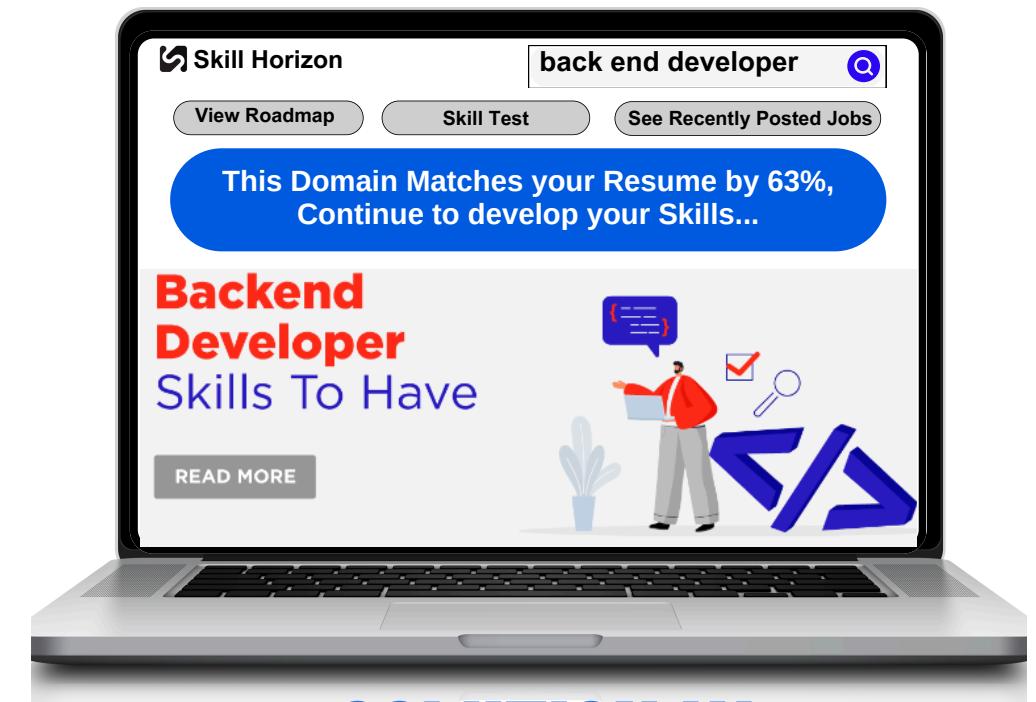


Proposed Solution : (Skill Horizon)

- AI-driven platform analyzes your uploaded resumes.
- Identifies skill gaps and receive learning paths, take competency diagnostic tests to assess readiness.
- Learn courses from suggested websites, make profile score updates with verified certifications.
- AI-powered job/internship recommendations based on updated profiles.



PROBLEM ???

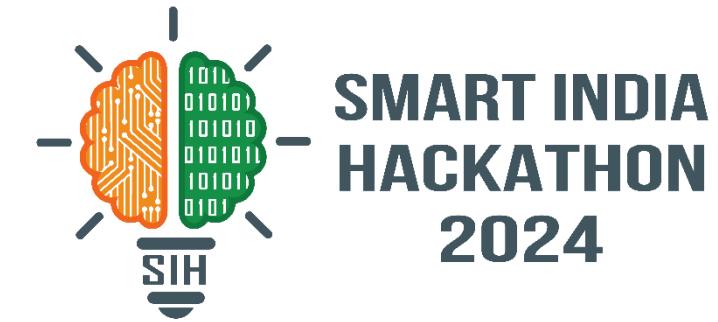


SOLUTION !!!

Uniqueness:

Combines AI-based resume analysis with adaptive learning and competency testing for real-time career growth.

TECHNICAL APPROACH



TECHNOLOGIES

Programming Languages and Framework Used:

Web Application :

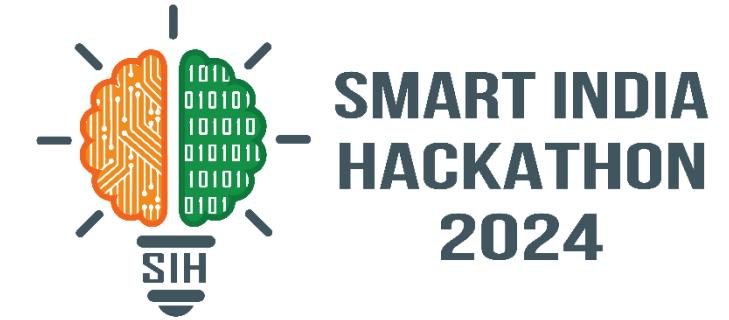
- **AI & ML:** TensorFlow, Scikit-learn for resume analysis and job recommendation.
- **Backend:** Python, Node.js, MongoDB for storing user profiles, skill gaps, and learning pathways.
- **Frontend:** React.js for creating a user-friendly interface.

Project Status : Currently, we are working on prototype, 60% of project has been built.

METHODOLOGY



FEASIBILITY AND VIABILITY



Analysis of the feasibility of the idea

- **AI Integration** : Use TensorFlow and Scikit-learn for resume analysis and job recommendations
- **Flexible Database** : Utilize MongoDB for scalable and diverse resume and skill diagnostic test data management.
- **Scalable Infrastructure** : Utilizes open-source tools and scalable infrastructure for development.



Potential challenges and risks

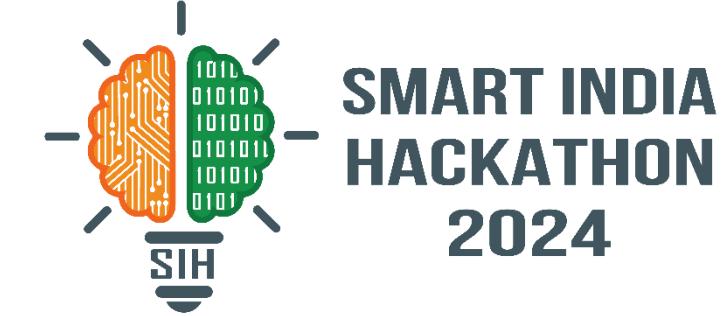
- **Data Privacy Concerns** : Protect sensitive information like resumes and personal details.
- **User Engagement** : Ensure continuous user interaction and platform retention.
- **AI Accuracy** : Ensuring the AI-driven job recommendations and skill gap analysis are reliable and accurate.



Strategies for overcoming these challenges

- **Data Privacy** : Implement encryption (TLS/SSL) and role-based access control (RBAC) for secure data management.
- **User Engagement** : Use gamification and community features to enhance retention.
- **AI Accuracy** : Regularly update AI models with new datasets and user feedback to maintain accuracy.

IMPACT AND BENEFITS



Potential Impact on the Target Audience

- **Career Growth:** Job seekers and professionals looking to shift domains.
- **Improved Employability:** Closes skill gaps and improves resumes for better jobs.
- **Informed Decisions:** Gives real-time job market data and insights on in-demand skills.



Benefits of the Solution

Social Benefits:

- **Skill Development:** Helps people learn new skills and reduce unemployment.
- **Career Guidance:** Provides personalized career advice for students and professionals.

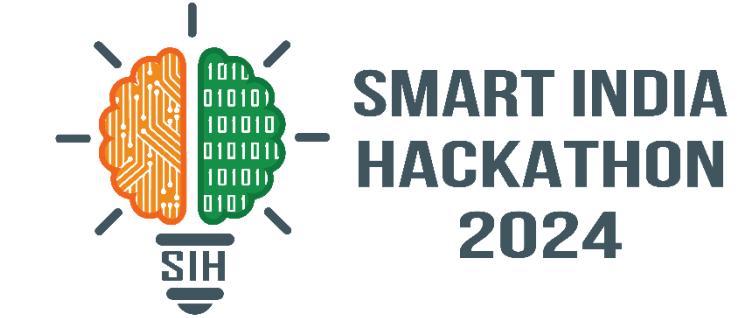
Economic Benefits:

- **Job Matching:** Helps companies hire faster and reduce recruitment costs.
- **Workforce Preparedness:** Prepares job seekers for high-demand jobs, boosting economy.

Environmental Benefits:

- **Remote Learning:** Promotes online education, reducing the need for buildings.
- **Sustainable Employment:** Supports remote work, cutting down on commuting.

RESEARCH AND REFERENCES



AI & Machine Learning in Career Platforms:

- Reference: "An Intelligent Career Guidance System using Machine Learning"
- Source: IEEE, 2022.
- Details: Discusses how AI is transforming career services by improving job matching and skill gap analysis

Competency Diagnostics & Adaptive Learning:

- Reference: "AI-enabled adaptive learning systems: A systematic mapping of the literature"
- Source: Computers and Education: Artificial Intelligence. Volume 2, 2021, 100017
- Details: Explores adaptive learning and how competency diagnostics can personalize education and career growth.

AI-Powered Resume Analysis:

- Reference: "Using AI to Eliminate Bias from Hiring"
- Source: Harvard Business Review, 2020.
- Details: Highlights how AI-driven resume parsing enhances recruitment by identifying key skills and qualifications.

Scikit-Learn for Skill Gap Analysis:

- Reference: "Machine Learning Algorithms for Skill Gap Analysis in Recruitment"
- Source: Scikit-learn Documentation.
- Details: Provides insights into using machine learning algorithms for analyzing skills and suggesting improvements.