



**NATIONAL LEVEL VIRTUAL HACKATHON**

# **SuPrathon 2K25**

**PROBLEM STATEMENT ID : SP25-AM06**

**TEAM NAME: SoloSync**

**MEMBERS NAME: Swayam Sharma**

**ROLES:** Full Stack Developer, AI Engineer

**Domain:** AI - ML

**PROBLEM STATEMENT :-** Analyze recorded interviews using AI to detect performance patterns—emotion, hesitation, confidence. Output feedback with sections needing improvement.

- **Traditional interviews are time-consuming and often subjective.**
- **Candidates rarely receive detailed, actionable feedback.**
- **Hiring managers face inefficiencies in scaling and bias.**
- **There's no structured, automated interview feedback system.**

**SoloSync's NeuHire project tackles this by using AI to analyze responses and generate personalized feedback based on fluency, confidence, and sentiment.**

# PROPOSED SOLUTION

NeuHire is an AI-powered system that:

- Conducts mock interviews with predefined Q&A.
- Accepts both text (working) and speech (planned) responses.
- Uses NLP to evaluate fluency, confidence, sentiment, and content relevance.
- Generates intelligent, section-based feedback.
- Helps both candidates (self-evaluate) and recruiters (pre-screen).

**⚠ Status: Prototype — text feedback and UI mockups ready. NLP & audio analysis in progress.**

# TECH STACK & ARCHITECTURE

## Tech Stack:

- Frontend: HTML/CSS (Prototype), React.js (Planned)
- Backend: Python (Flask)
- AI/NLP: HuggingFace Transformers, NLTK, SpaCy
- Audio Analysis: SpeechRecognition, PyAudio (Planned)
- Hosting: GitHub Pages / Netlify
- Data: Custom Q&A interview dataset

## Architecture Flow:

**Interview Begins → Candidate Responds → NLP Processing → Scoring  
→ Feedback Displayed/Exported**

# DEMO & FEATURES

-- Implemented: --

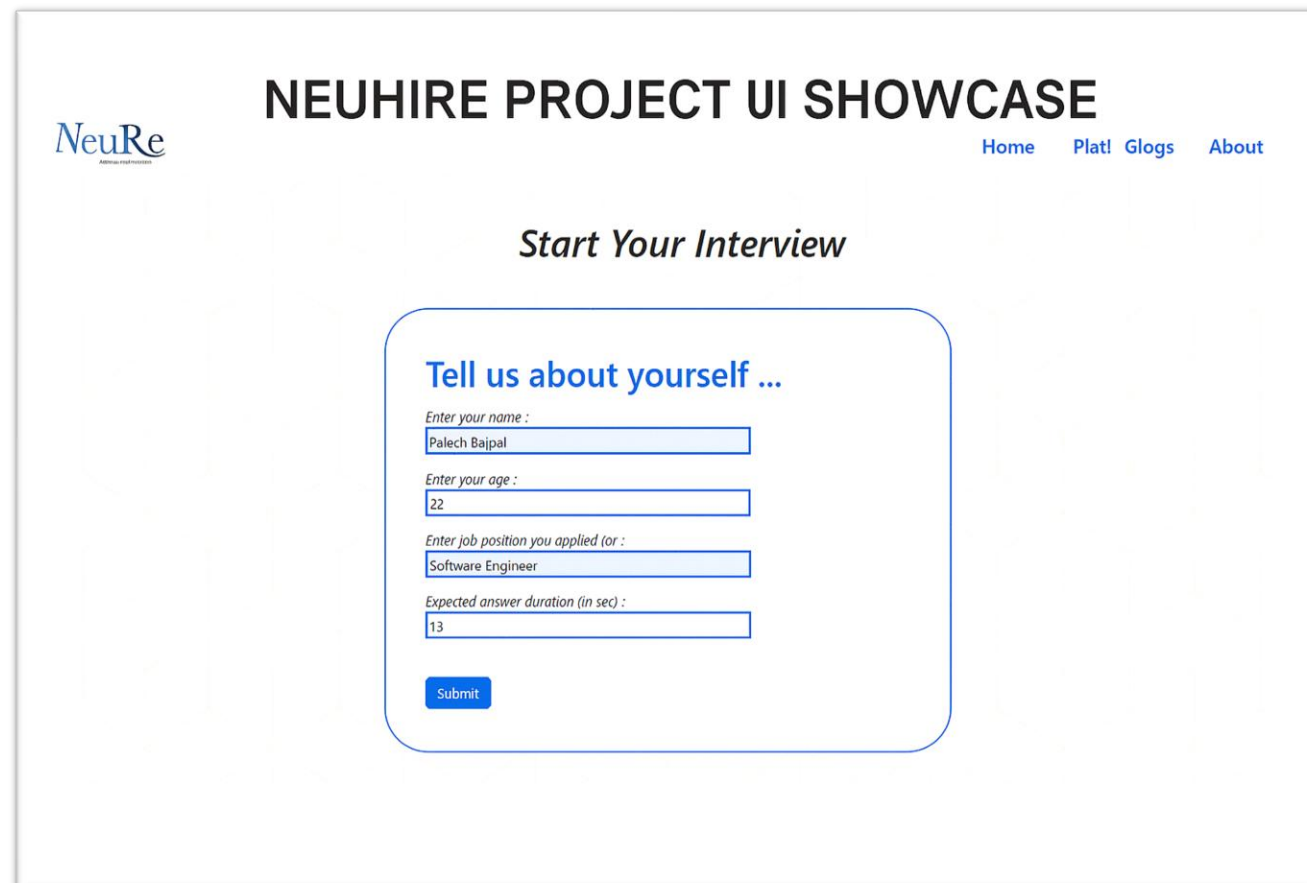
- Text Input-Based Interview Simulation
- UI Mockup (HTML/CSS)

-- Planned: --

- Speech-to-Text Input
- AI (BERT/GPT) NLP Scoring
- Sentiment & Fluency Feedback
- Recruiter/Admin Dashboard

-GitHub: [https://github.com/swayam1604/neu-hire\\_suprathon](https://github.com/swayam1604/neu-hire_suprathon)

## UI MOCKUP SCREENSHOTS



NEUHIRE PROJECT UI SHOWCASE

Home Platf Glogs About

Start Your Interview

Tell us about yourself ...

Enter your name :  
Palech Bajpai

Enter your age :  
22

Enter job position you applied for :  
Software Engineer

Expected answer duration (in sec) :  
13

Submit



Hello Palash Bajpai

Q. Tell us about yourself

Start Recording

× Recording over! Evaluate your answer on basis of emotions you expressed.

Evaluate

Back

# IMPACT & FUTURE SCOPE

## -- Impact:

- Helps candidates identify weak areas and improve performance.
- Offers scalable, unbiased evaluation for recruiters.
- Saves time and ensures consistency in candidate screening.

## -- Future Scope:

- Complete audio analysis and speech scoring.
- Resume-to-Interview matching system.
- Interview analytics dashboard for recruiters
- Gamified mock interview experience for students.