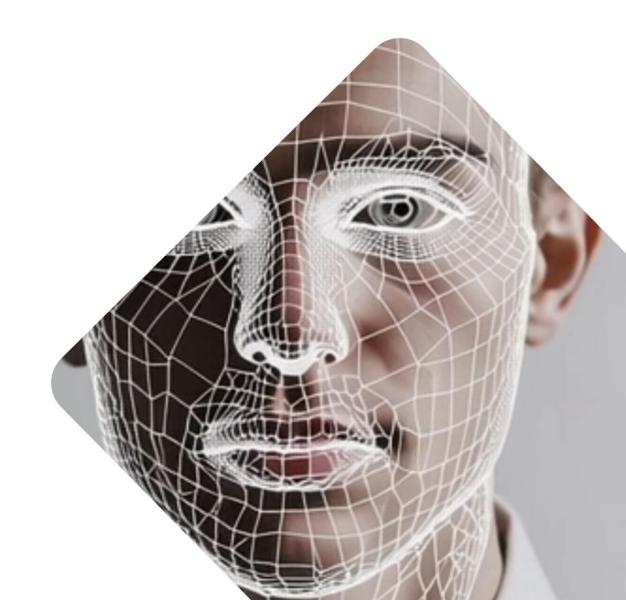
AVATAR LABS

Innovative & Seamless AI Talking Heads

VISHAL RAJ V 23BD1A0BU G331



TECHNICAL JOURNEY

- NEXT.JS
- POSTGRESSQL & MONGODB
- INTEGRATION OF DIFFDUB & SMALL-E
- SETUP OF NGROK
- ROBUST VIDEOMATTING IMPLEMENTATION
- UTILIZATION OF PRISMA



KEY LEARNINGS IN DEVELOPMENT

CHALLENGES IN PROJECT IMPLEMENTATION



MODEL IMPLEMENTATION

Shifting to a New Architecture

INTEGRATED NGROK FOR LOCAL SERVER ACCESS

The integration of ngrok allows for seamless local server access, enhancing development efficiency.

1

SWITCH TO DIFFDUB MODEL

Replaced DiffTalk with DiffDub

2

INTEGRATION OF ROBUST VIDEO MATTING

Integration of advanced video matting techniques for background removal for output videos.

MILESTONE ACHIEVEMENTS

- CONFIRMED CORE PIPELINE FUNCTIONALITY
- ACHIEVED VIDEO QUALITY
- DEPLOYMENT REMAINS INCOMPLETE

MODEL DEEP DIVE

SELECTED MODEL: DIFFDUB

ALTERNATIVE MODEL: VQ-VAE-2

ALTERNATIVE MODEL: STYLEGAN

ALTERNATIVE MODEL: SYNCTALK

ALTERNATIVE MODEL: SADTALKER