

AMAN MULANI

Pune, Maharashtra | +91-7744072907 | amaanmulani4@gmail.com | linkedin.com/in/amaan-mulani-846748217 | github.com/amaan7744

SUMMARY

Graduated from Sinhgad Academy of Engineering Kondhwa, and Python-focused Software Engineer with hands-on experience building automated, API-driven backend systems and full-stack web applications. Designed and shipped a scheduled content-processing pipeline integrating speech recognition, voice synthesis, and video processing, deployed via GitHub Actions CI/CD. Comfortable across the stack (Python, JavaScript/React, Node.js) with a growing focus on backend engineering, automation, and applied AI integrations.

TECHNICAL SKILLS

- Languages: Python, JavaScript, C++, SQL
- Backend & APIs: Flask, Node.js, Express.js, REST API design & integration, YouTube Data API v3, OpenAI API
- Frontend: React.js, HTML5, CSS3, Bootstrap
- AI / Automation: OpenAI-Whisper (speech-to-text), Coqui XTTS-v2 (voice cloning/TTS), FFmpeg-based video processing, workflow automation
- Databases: MongoDB, SQL
- DevOps & Tools: Git, GitHub, GitHub Actions (CI/CD), Docker, Linux/Bash

PROJECTS

Automated Media Content Pipeline

Personal Project

Python, GitHub Actions, OpenAI-Whisper, Coqui XTTS-v2, FFmpeg, yt-dlp, YouTube Data API

- Designed a modular Python pipeline that automates end-to-end video processing: source retrieval, audio-based highlight detection, clip extraction, transcription, and vertical-format video assembly.
- Integrated OpenAI-Whisper for automatic transcription/subtitle generation and Coqui XTTS-v2 for voice-cloned speech synthesis, chaining multiple ML models into a single automated workflow.
- Built a scheduled CI/CD pipeline using GitHub Actions (daily cron trigger) that installs dependencies, runs the full pipeline headlessly, and persists rotation state back to the repository via automated commits.
- Iterated the architecture across multiple content-source variants, refining the pipeline over 800+ commits to improve reliability and processing speed.

Voice Synthesis REST API

Personal Project

Python, Flask, Coqui XTTS-v2

- Built a standalone Flask microservice exposing a REST endpoint that converts text input into synthesized speech using the XTTS-v2 model.
- Decoupled the TTS engine from the main content pipeline into an independently callable service, improving reusability across projects.

Movie Booking Platform

Personal Project

React.js, Node.js, Express.js, MongoDB, REST API, Bootstrap

- Built a full-stack movie booking web application using the MERN stack, including user authentication and a booking history view.
- Designed RESTful API endpoints in Express.js/Node.js to handle user accounts, movie listings, and bookings, backed by MongoDB.
- Implemented a responsive React frontend styled with Bootstrap for consistent behavior across screen sizes.

EXPERIENCE

Full-Stack Developer Intern — DevTown (Remote)

Jul 2023 – Nov 2023

- Developed and maintained frontend and backend features using the MERN stack under senior developer guidance.
- Built responsive UI components in React and integrated them with REST APIs backed by Node.js, Express.js, and MongoDB.
- Debugged reported issues, participated in code reviews, and collaborated with the team using Git and GitHub.

Frontend Developer Intern — TXON (Remote)

Apr 2023 – May 2023

- Built responsive web pages and reusable UI components using HTML, CSS, and JavaScript.
- Implemented and tested small interactive applications (calculator, to-do list), collaborating with a small dev team via Git.

EDUCATION

B.E., Electronics & Telecommunication — Sinhgad Academy of Engineering, Pune

Expected May 2026