

SOMAN CHALISE

Nashik, Maharashtra, India

somanchalise@gmail.com

linkedin.com/in/somanchalise

github.com/soman-chalise

About Me

- A passionate and curious Computer Engineering student with strong interests in AI, ML, and innovative problem-solving. I enjoy building impactful tools—from intelligent assistants to document analyzers—and constantly seek opportunities to learn, experiment, and grow through hands-on projects and real-world challenges.

Education

Savitribai Phule Pune University

Bachelor of Engineering, Computer Science

Expected 2026

Pune, Maharashtra

Relevant Coursework

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|------------------------------|-------------------------------|-------------------------------|---------------------------------------|
| • Data Structures Algorithms | • Object-Oriented Programming | • Database Management Systems | • Machine Learning
• Deep Learning |
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Projects

Hey-Buddy – Your Personal Voice-Based System Assistant | *Python, Tkinter, Groq API, ScreenPipe*

- Developed a voice-activated AI assistant for desktop enabling hands-free app launching, code generation, and system automation using Groq-powered reasoning and ScreenPipe for system control.
- Implemented wake-word activation (“Hey Buddy”) achieving responsive, natural language understanding for commands like “open VS Code” or “type Hello world.”
- Created a custom floating UI with Tkinter for minimal distraction, auto-hide, and always-on-top behavior enhancing usability.
- Packaged the application into a standalone Windows executable (.exe) with PyInstaller for zero-install, seamless user experience.
- Handled all aspects solo, from concept, architecture, integration, to testing, ensuring robust, user-friendly assistant functionality.

AI-Powered PDF Reader | *Python, Flask, LangChain, Gemini API*

- Designed a web app for uploading PDFs that generates concise summaries and answers document queries using large language models.
- Planned document chunking and semantic search to enable sub-3 second context-aware responses over 100+ page documents.
- Leveraged LangChain framework and Gemini API to orchestrate fast, accurate question answering.
- Architected Flask backend to support asynchronous processing for 50+ simultaneous users with secure temporary file handling to ensure data privacy.
- Focused on scalable design allowing future extensions such as multi-file support and cloud syncing.

Project Anon: Face Blur in Video/Image Input | *Python, OpenCV, Flask, CNN Models*

- Built a privacy-focused application that anonymizes faces or sensitive regions in images/videos by detecting and blurring them automatically using a lightweight CNN-based Ultra Light Fast Generic Face Detector.
- Implemented age and gender classification filters with OpenCV DNN models, processing each face within 0.2-0.3 ms enabling selective anonymization by criteria.
- Provided multiple anonymization methods including Gaussian blur, pixelation, and black occlusion patches, configurable by users for privacy preferences.
- Developed a web interface supporting upload and live video processing, detecting and anonymizing faces dynamically for privacy protection.

Certifications & Achievements

- Ranked Top 100 in HackHazard Hackathon organized by Name Space Community, demonstrating competitive coding and problem-solving skills.
- Completed Kaggle Micro-Courses in Python, Pandas, and Machine Learning, solidifying foundational data science and ML knowledge.