

## SKILLS

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- **Languages:** Python, JavaScript, SQL, C++
- **Databases:** MongoDB, Supabase, SQLite
- **Frameworks:** Flask, Next.js, Tailwind CSS, Selenium, Pygame
- **DevOps:** Docker, k3s, Linux, Git

## EXPERIENCE

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- **Facts-n-Data** Remote  
*Software Development Intern* Mar 2024 – Apr 2025
  - **E-Commerce Automation:** Built and maintained **30+** data scraping and automation scripts across **Amazon**, **FirstCry**, and **Myntra**, collecting data on **10,000+** products to enable large-scale analysis.
  - **Analytics & Monitoring:** Developed scripts for **BSR tracking**, **search term analysis**, and **real-time stock monitoring** to drive data-informed business decisions.
  - **Internal Tooling:** Refactored legacy codebases for improved efficiency and built internal tools including **user authentication** systems and **employee management dashboards**.
- **BLITZ, The Computer Science Society** Keshav Mahavidyalaya, Delhi University  
*Secretary* Aug 2025 – Present
  - **Web Development:** Designed and developed the **official society website** for both annual cycles, reaching **5,000+** students and serving as the primary digital presence for events and announcements.
  - **Volunteer Management:** During flagship events, **managed all volunteers** on-ground. Assigned tasks, delegated responsibilities, and ensured smooth execution across all event verticals.
  - **Faculty Coordination:** Acted as the **primary liaison** between the society team and faculty, coordinating with professors to maintain clear and consistent communications.
- **University of Melbourne** Melbourne, Australia (Remote)  
*Machine Learning Engineer (Contract)* Dec 2023
  - **Multimodal Pipeline:** Built an end-to-end **multimodal Twitch analytics pipeline** processing **13+ TB** of video, audio, and live chat across **40** streamers to produce minute-level **sentiment, toxicity, and emotion** signals.
  - **Computer Vision:** Implemented **GPU-accelerated face identity filtering** using **InsightFace** embeddings and cosine similarity to robustly isolate streamer face frames across VOD segments; classified emotions per-chunk with **DeepFace**.
  - **NLP & Audio Analysis:** Integrated **faster-whisper** for speech transcription and engineered audio features (pitch, RMS loudness, bitrate). Built a multi-model scoring layer combining **GoEmotions**, **Detoxify**, and **HateSonar** for chat and transcript analysis, achieving **92%** accuracy on emotion classification.
  - **Tooling & Infrastructure:** Productionized the system with a **CUDA-enabled Docker** environment; built a **Flask-based human-in-the-loop face embedding builder** to bootstrap per-streamer identity recognition for the CV pipeline.
- **PM Shri Kendriya Vidhyalaya** Vigyan Vihar, Delhi  
*Publication Captain* Apr 2023 – Mar 2024
  - **School Magazine:** Managed all entries and editorial coordination for the annual school magazine publication.
  - **School Blog:** Developed and maintained the **entire school blog**, serving as the primary platform for school news and student content.

## PROJECTS

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- **Planq** – Exam Preparation Platform [Website](#) | [GitHub](#)
  - **Question Bank:** Curated a database of **47,000+** previous year questions spanning **6 All-India entrance exams**, serving **240+** registered students with **500+** concurrent live sessions at peak load.
  - **Smart Scheduling:** Implemented an **Anki-like spaced repetition** algorithm that schedules topics based on individual student performance and preparation analytics.
  - **Test Generation:** Built dynamic **test generation** and preparation analysis features to track student progress across subjects and difficulty levels.
- **Memoria** – Self-Hostable AI Blog Engine [GitHub](#)
  - **PDF Pipeline:** Engineered a pipeline to extract text and images from PDFs, generate captions using a **vision model**, and output clean **Markdown** posts.
  - **Architecture:** Designed as a self-hostable **AI blog engine** built with **Flask** and **Supabase** for easy deployment and content management.
- **MongoDB Explorer** – Desktop MongoDB Client [GitHub](#)
  - **Desktop Client:** Built a lightweight desktop **MongoDB** client with **Python** and **DearPyGui** as an alternative to MongoDB Compass.
  - **Features:** Supports browsing databases, editing documents, running queries, managing indexes, **schema analysis**, and data import/export.
- **Donut Shop** – Home Server Infrastructure
  - **Cluster Setup:** Built a **2-node Linux cluster** in a **master-worker** configuration orchestrated with **k3s** and **Longhorn** for persistent storage.
  - **Services:** Deployed and managed **NAS**, media streaming (**Plex/Jellyfin**), **VPN**, and various containerized services.

## EDUCATION

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- **Keshav Mahavidhyalaya, Delhi University** Pitampura, Delhi  
*Bachelor of Science in Computer Science; CGPA: 6.88 (Till 3rd Semester)* *Aug 2024 – May 2028*
- **PM Shri Kendriya Vidhyalaya** Vigyan Vihar, Delhi  
*10+2, PCM; 88%/73%* *April 2012 – March 2024*

## ACHIEVEMENTS

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- **Pariksha Pe Charcha 2024:** Presented AI project in front of the Hon'ble Prime Minister of India.
- **Smart India Hackathon 2025:** Secured **1st Runner-Up** in the Internal Round at Keshav Mahavidyalaya, Delhi University.
- **Brainwave 2.0 Hackathon (2026):** Secured **3rd place** in the Hardware track and **8th overall** as Finalists at the 36-hour hackathon by Dept. of IT, DTU, in association with AIMS-DTU.