

# KALPANA DEVI T

 +91 82200 93277  kalpanadevi7e@gmail.com  
 <http://www.linkedin.com/in/kalpanadevi4b1140264>  Theni

---

## SUMMARY

Enthusiastic Computer Science graduate with a strong interest in software development, data structures, and algorithms. Currently focused on expanding my knowledge through hands-on projects and continuous learning. Eager to apply my growing skills in a dynamic tech environment.

---

## EDUCATION

### B.E-Computer Science Engineering(2022- Present)

Jansons Institute of Technology,Coimbatore

CGPA - 7.7 (Upto 6th Sem)

**HSC (2022) - 83%**

**SSLC(2020) - 92%**

Scism.Mat.Hr.Sec.School,Bodinayakanur,Theni

## CERTIFICATIONS

- Certification in programming languages C , C++ , Python
- Data analytics
- Artificial Intelligence
- Machine Learning

---

## SKILLS

- **Programming Languages:** Python, C ,JavaScript,HTML,CSS
- **Tools & Platforms:** Git, GitHub, Swagger UI, VS Code
- **Backend & API Development:** FastAPI, RESTful APIs, API Integration, OAuth 2.0 Authentication, Token-Based Authorization, Background Task Processing
- **Databases & Storage:** Supabase, SQL (Basics), Data Modeling, Vector Indexing (FAISS)
- **Software Architecture & Concepts:** Modular Architecture, Scalable System Design, Configuration-Driven Development, Service-Oriented Design, Environment-Based Configuration
- **Libraries & Frameworks:** Pandas, NumPy, Scikit-learn, OpenCV, Keras,Puppeteer(JS)
- **Tools & Platforms:** Git, GitHub, Swagger UI, VS Code

---

## WORK EXPERIENCE(INTERNSHIPS)

- **Currently working as Python and AI Developer intern** at BRANDINGBEEZ,Coimbatore
- Worked as business analyst intern in a project (Freeze drying machineries) at SAKTHI VEERA GREEN ENERGY PVT. LTD,Chennai
- Worked as IOT intern in IYARKAI TECH LAB PVT.LTD,Chennai
- Completed internship at NOVITECH R&D PVT.LTD in Data analytics
- Completed internship at NOVITECH R&D PVT.LTD in Artificial intelligence
- Completed internship at NOVITECH R&D PVT.LTD in Machine learning

---

## ACHEIVEMENTS

- Participated in paper presentation in Karunya University and won 2nd prize
- Got selected in top 100 teams in national level idea presentation(Hack4purpose) held at Anna University,Chennai
- Participated in some technical events conducted in various colleges.

## PROJECT EXPERIENCE

### AI-Based Automated Web Analysis System (Live Production Tool)

**Product:** brandingbeez.co.uk

- Developed and deployed a production-grade AI web analysis platform for automated website scraping, keyword extraction, and structured SEO report generation using LLM integration. Built a modular backend with secure API communication and structured JSON workflows, actively used in live client environments.
- Technologies: Python, FastAPI, Node.js, REST APIs, Headless Browser Automation, Git

### Hybrid AI Chatbot with RAG Architecture (Deployed System)

**Product:** acgraphics.com

- Designed and deployed a production-ready RAG-based AI chatbot using FastAPI, OpenAI APIs, and FAISS for company-specific conversational responses. Implemented intent classification, enquiry detection, brand-tone enforcement, and real-time fallback mechanisms within a scalable, configuration-driven architecture.
- Technologies: Python, FastAPI, OpenAI API, FAISS, RAG, REST APIs, Web Scraping

### Gmail Automation System (Live API Integration)

**Product:** Octupus.ai

- Built and integrated a live Gmail automation system using OAuth 2.0-based Gmail API authentication for secure mailbox access and automated unsubscribe processing. Designed scalable backend workflows with background task execution and API documentation via Swagger UI for production testing.
- Technologies: Python, FastAPI, Gmail API, OAuth 2.0, REST APIs, Swagger UI

### AI-Powered Web Scraper & Article Summarizer

- Built an end-to-end Python application to scrape articles from news/blog websites, generate AI-based summaries, and store structured data in Supabase. Developed a simple HTML & CSS frontend to display article titles, summaries, published dates, and source links, and deployed the project with version control on GitHub.
- Technologies: Python, Web Scraping, AI/NLP, Supabase, HTML, CSS, GitHub

### License Plate Recognition System

- Built an Automatic License Plate Recognition (ALPR) system using OpenCV and Pytesseract OCR to extract vehicle registration numbers from images and video feeds. Implemented Canny Edge Detection, contour filtering, grayscale conversion, and region-of-interest (ROI) extraction to accurately localize license plates before text recognition.
- Technologies: Python, OpenCV, Canny Edge Detection, Pytesseract, OCR, Computer Vision, Image Processing

### Face Recognition System

- Developed a real-time face detection and recognition system using the Haar Cascade Classifier in OpenCV. Implemented optimized frame-by-frame processing with grayscale conversion and feature extraction to ensure accurate facial detection under varying lighting conditions.
- Technologies: Python, OpenCV, Haar Cascade, Computer Vision, Image Processing

### Moving Object Detection

- Designed a real-time motion detection system using frame differencing, background subtraction, and contour detection in OpenCV. Applied thresholding, noise reduction, and bounding box tracking to improve detection accuracy and minimize false positives in live video streams.
- Technologies: Python, OpenCV, Computer Vision, Image Processing