

SWAYAM YADAV

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Education

Kalinga Institute of Industrial Technology, Bhubaneswar, India
Bachelor of Technology in Computer Science & Engineering

Oct 2021 – May 2025
CGPA: 7.22/10

St. Joseph College, Bhalwari, Nepal
Senior Secondary School (12th)

Oct 2018 – April 2020
CGPA: 3.22/4

Skills

- **Languages:** Python, TypeScript, Bash
- **Frameworks:** Flask, FastAPI, Pydantic, React, AGNO
- **Databases:** MongoDB, PostgreSQL, Neo4j, Milvus, Amazon RDS
- **Cloud & DevOps:** AWS (Lambda, Texttract, API Gateway, S3, Amplify), Docker, Git, GitHub Actions, CI/CD
- **APIs & Tools:** REST API design, Amazon Ads API, Postman
- **AI & NLP:** OpenAI GPT, Anthropic Claude, Google Gemini API, prompt engineering
- **Testing & Methodologies:** Pytest, Agile/Scrum, Git branching

Work Experience

SDE Intern — SkillRank
Remote

Nov 2024 – May 2025
New York, USA

CivicSight AI — MPUD Generation Platform

- Engineered backend services in **FastAPI**/Python to drive an LLM-based chatbot for automated MPUD creation.
- Processed 100%+ planning PDFs weekly with **AWS Texttract**, **PyMuPDF**, and **pdfplumber**, achieving 95% data accuracy.
- Expanded COA rule engine with **Pydantic** models, boosting approval consistency by 30%.
- Cut database load by 80% through batched metadata retrieval and in-memory **LRU caching**.

CivicSight AI — MPUD Generation Platform (Agentic Approach Prototype)

- Designed and implemented an end-to-end **AGNO**-based AI workflow to automate MPUD condition generation, improving code organization by cleanly separating agent logic from core workflow.
- Developed a schema-aware toolkit to integrate LLM agents with Neo4j, boosting maintainability by isolating **ai agent** definitions and modifications in a dedicated module.
- Leveraged AI-driven validation loops for deduplicated, context-aware condition recommendations, enabling seamless scalability—new agents can be added without cluttering the main workflow.
- Orchestrated a modular multi-agent pipeline, producing CI/CD-ready approval reports with markdown formatting.

FASST Real Estate Website

- Created 15 reusable HTML/CSS components for a **Flask**/Python application that served 200+ daily users, reducing front-end development time for subsequent features by 15%.
- Automated ingestion of SIRS PDFs via **AWS Texttract** and **Google Gemini API**, reducing manual effort by 80%.
- Architected a **MongoDB** schema for real-time property lookups; exposed REST endpoints for the frontend.

AdTech Analytics Dashboard

- Built backend ETL pipeline with **AWS Lambda** and **Amazon RDS**, ingesting daily ad metrics (impressions, clicks, etc.).
- Integrated the **Amazon Ads API** to automate report downloads, eliminating manual pulls entirely.
- Exposed RESTful APIs consumed by a React dashboard, improving data-freshness to under 5 minutes.
- Implemented retry logic and CloudWatch alerts, reducing pipeline failures by 90%.

Projects

Neo4j Expert Agent Integration – LLM-Powered Graph Database Assistant

[GitHub](#)

- Built an AGNO-based intelligent agent using **Claude/OpenAI LLMs** and **Neo4j**, processing 500+ natural-language prompts per day into optimized Cypher queries.
- Developed schema-aware dynamic querying and automatic schema generation in **Python**, reducing schema drift by 40%.
- Leveraged the **AGNO framework** for node and relationship management with avoidance of duplicates, ensuring 99% data integrity across 1,000+ graph entities.

EXTRACURRICULAR ACTIVITIES

Active Member of Obstruction Dance Crew, Nepal

Jan 2018 – Present

- Contribute to choreography and performance planning