

Shaileja Kuthuru | shailejak.com

SOFTWARE ENGINEER | GENERATIVE AI & RAG | PYTHON | AWS | SQL

Contact: +1(401) 422-8524 Email: kuthurushaileja@gmail.com LinkedIn: [Linkedin.shailejakuthuru](https://www.linkedin.com/in/shailejakuthuru)

PROFESSIONAL SUMMARY:

Software Engineer with hands-on experience in Python, SQL, AWS, automation, and application development, with a growing focus on Generative AI and Retrieval-Augmented Generation (RAG). Built AI-powered applications featuring semantic search, embeddings, local LLM inference, conversational interfaces, and source-grounded responses. Experienced in developing and troubleshooting data-driven systems, REST APIs, cloud workflows, and automation solutions, with a strong foundation in data structures, object-oriented programming, and analytical problem-solving.

TECHNICAL SKILLS:

Programming & Development: Python, SQL, MySQL, JavaScript, TypeScript, React, Next.js, Flask, REST APIs, Git

AI & Generative AI: Retrieval-Augmented Generation (RAG), LLM Applications, Semantic Search, Embeddings, Prompt Engineering, Ollama, Gemma 3, AI-Assisted Development

Cloud & Systems: AWS (S3, EC2, RDS), Application Troubleshooting, Automation, Data Validation, Debugging

Data & Analytics: Power BI, DAX, Power Query, Data Cleaning & Transformation, Exploratory Data Analysis (EDA)

Computer Science: Data Structures & Algorithms, Object-Oriented Programming (OOP)

Functional Competencies: Stakeholder Engagement, Executive Communication, Operational Performance Improvement, Cross-cultural Adaptability.

PROFESSIONAL EXPERIENCE:

Software Engineer / Analyst, Ventois | Remote | Nov 2025 – Aug 2026

- Improved application troubleshooting and data-validation workflows by developing Python and SQL scripts to analyze system data, identify inconsistencies, and support root-cause investigation across internal applications.
- Reduced repetitive manual analysis by ~30% by automating recurring data-processing and reporting tasks with Python, enabling faster validation and issue resolution.
- Accelerated technical issue investigation by querying and analyzing application data with SQL, reproducing defects, reviewing system behavior, and documenting findings for engineering and business stakeholders.
- Supported AI-assisted workflow experimentation by applying generative AI tools to code analysis, documentation, debugging, and structured information retrieval while validating generated outputs before use.
- Improved reliability of cloud-based workflows by supporting AWS services and application environments, investigating data and configuration issues, and collaborating with technical teams on resolution and testing.

Data Analyst, NeoTech Cloud | NJ | Jan 2024 – Oct 2025

Role scope: Individual contributor within a 5-member analytics team, supporting ~20 business users

- Enhanced e-commerce reporting workflows using **SQL, Python, and AWS**, improving data availability and refresh consistency for daily and weekly analytics.
- Led requirement-gathering and UAT discussions with **Business, Operations, and Engineering** teams, improving dashboard clarity and stakeholder adoption.
- Partnered with Operations and Finance teams to define KPIs and resolve cost and sales data mismatches, identifying **5–6 actionable insights** related to margin and expense tracking.

- Designed **Power BI dashboards** to monitor sales performance, costs, and vendor metrics, enabling **15–20 stakeholders** with self-service access to insights.
- Automated weekly reporting and ad-hoc data extracts using **Python**, saving approximately **15–20 hours per month** across the team.

System Analysis Intern, DRDO | India | Jan 2022 – Mar 2022

- Automated data preprocessing and analysis tasks using Python, reducing manual effort by 15–20% for recurring research datasets.
- Collaborated with research and lab teams to define and apply basic data cleaning and validation standards, improving dataset consistency across experiments.
- Identified and resolved common data issues such as missing values and duplicates, uncovering 3–4 recurring quality problems in incoming datasets.

TECHNICAL PROJECTS: github.com/Shailleja

Momo 2.0 – Voice-Enabled Portfolio Assistant | Python | Flask | Next.js | React | TypeScript

- Developed a voice-enabled portfolio assistant with intent-based query processing, REST API integration, browser speech recognition, and speech synthesis; integrated the assistant into a Next.js portfolio to provide interactive access to professional experience, technical skills, projects, education, certifications, resume, and professional links.

DocuMind AI – Multi-Document RAG Assistant | Python | RAG | Ollama | Streamlit

- Built an end-to-end Retrieval-Augmented Generation (RAG) application for querying multiple PDF documents; implemented document chunking, semantic embeddings, similarity-based retrieval, local LLM inference, and source-grounded responses with filename and page citations.

Amazon Sales Analysis | SQL | Power BI | DAX | Power Query

- Built data transformation, modeling, and interactive reporting workflows in Power BI; developed DAX-based KPIs including YTD/QTD sales, products sold, and customer-review metrics to analyze sales and product performance.

EDUCATION:

Anderson University, Anderson, SC

August 2026 – Expected May 2029

Doctor of Education (EdD) in Leadership and Artificial Intelligence

Clark University, Worcester, MA

Master of Science in Information Technology – GPA: 3.67/4.0

August 2022 – December 2023

Gurunanak Institute of Technology, India

Bachelors in ECE – GPA: 3.4/4

June 2018 – June 2022

CERTIFICATIONS:

AWS Certified Solutions Architect – Associate

AWS Certified Cloud Practitioner

IBM Data Science Professional Certificate