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PROFESSIONAL SUMMARY

Certified Apache Airflow Professional and passionate Airflow/MLAI Developer with 5+ years of experience in Python, SQL, and data workflows, including 2.5+ years of hands-on Apache Airflow. Skilled in Big Data integration, ETL pipeline design, and workflow orchestration. Adept at working with single-node Airflow deployments for lightweight, production-ready pipelines and integrating cloud services such as AWS S3, DynamoDB, and PostgreSQL. Strong background in Data Science and ML modules, supporting model training and automation alongside data engineering tasks. Experienced trainer who has taught Python, SQL, and Airflow fundamentals, and delivered projects ranging from event data automation (Ceamless) to audio data pipelines with ML workflows (Xounds).

SKILLS

Programming Languages: Python, SQL.

Workflow Orchestration: Apache Airflow (DAG Authoring, scheduling. Operators, sensors, XComs.

Databases: PostgreSQL, DynamoDB, MySQL, SQLite.

Machine Learning & AI Libraries: Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, SpeechBrain,

Whisper, TensorFlow, PyTorch.

Backend Frameworks: FastAPI, Flask, Streamlit.

Cloud & DevOps: Amazon Web Services (AWS – Lambda, S3, EC2), Git, Docker, RESTful APIs, CI/CD. Specialized Expertise: Audio AI (Speaker Diarization, Abuse Detection), Natural Language Processing

(NLP), Predictive Analytics, ETL Pipelines.

WORK EXPERIENCE

Xounds Berlin, Germany Airflow & MLAI Developer

March 2025 – Present Dec 2024 – Feb 2025

- Used Apache Airflow running on single-node setup to schedule and manage small audio processing pipelines.
- Developed and scheduled workflows for handling audio data.
- Created pipelines to collect data from storage and prepare it for further use.
- Wrote Python-based tasks to organize and manage incoming data.
- Managed basic metadata storage and tracking for files.
- Contributed to backend services and cloud integration for the product.
- Created simple DAGs that picked up audio files from an S3 bucket, cleaned them, and stored the result back.
- Kept metadata (e.g. file name, status) in AWS DynamoDB using small Python scripts wrapped as Airflow tasks.
- Configured basic monitoring: retries for failed, so we knew if something broke.
- Leading ML feature development for an AI-powered mobile audio app.
- Developing ML pipelines for abuse detection, speaker diarization, and speaker verification.
- Built scalable backend APIs using FastAPI and AWS (Lambda, S3, EC2).

Ceamless Events, Berlin, Germany

Airflow/Data Developer

June 2024 – November 2024

• Set up a lightweight Airflow instance (single node, LocalExecutor) to automate event data workflows.

- Built DAGs to ingest attendee data (CSV/Excel files) from an S3 bucket and load it into PostgreSQL.
- Used FileSensor/S3KeySensor to trigger pipelines when new files arrived.
- Added Python tasks for data cleaning (removing duplicates, formatting phone numbers, normalizing names).
- Scheduled event-based jobs to generate summary reports (attendees stats, ticket sales) and email them to the team.
- Worked closely with the team to understand business data needs.
- Strengthened teamwork and collaboration skills in a startup environment.

Yess Infotech (Training Institute) – Pune, India Data Science & Python Trainer

Aug 2022 – Aug 2023

- Performed in-house training sessions on Python, SQL, Data Worflow fundamentals and Data Science topics.
- Designed and delivered introductory Airflow Sessions, covering
 - o DAG creation.
 - Using PythonOperator and BashOperator for small tasks.
 - o Introduction to Sensors (file arrival triggers) and XComs.
- Trained learners on best practices for **performance optimization** in data tasks.
- Introduced students to **Apache Airflow** with hands-on examples.
- Guided participants through **POC** projects in Airflow to demonstrate automation.
- Designed project frameworks for ETL, reporting, and basic data workflows.
- Supported learners in building end-to-end mini-projects.
- Created training material, exercises, and evaluations for classroom delivery.

Vocational Education Project – MP Govt. – India IT Trainer

Sep 2016 – Sep 2019

- Conducted training on Python, **SQL**, database management, and **IT** skills for 200+ students.
- Enhanced analytical and technical skills of learners.
- Supported the District Magistrate office's IT department in election database management.
- Assisted in maintaining departmental datasets and ensuring data accuracy.

KEY PROJECTS

- User Data ETL Pipeline with API & PostgreSQL (POC Project, 2025)
 - ❖ Designed a production-style Airflow DAG using the TaskFlow API.
 - ❖ Extracted data from an external API, transformed it into a standard format, and loaded it into PostgreSQL.
 - * Added data validation checks, retry logic, and monitoring to ensure reliability.
 - * Containerized the solution with **Docker & Docker Compose** for easy deployment.
 - ❖ Demonstrated **best practices**: error handling, logging, cleanup, and security (parameterized queries).
- Audio Abuse Detection & Speaker Diarization (Xounds)
 - ❖ Developed workflows in **Apache Airflow** to collect audio files from AWS S3 and process them for further use.
 - Used PythonOperator for audio processing tasks and custom operators for integration with DynamoDB metadata storage.
 - ❖ Deployed everything on a **single-node Airflow instance**, for small workloads.
 - Organized and tracked basic metadata using AWS DynamoDB.
 - Set up simple monitoring with retries and alerts to ensure reliability.
 - ❖ Built ML pipelines for real-time audio intelligence; deployed with AWS + FastAPI.

• AI Event Management System (Ceamless Events) –

- ❖ Built Airflow pipelines to process attendee files (CSV/Excel) and load cleaned data into PostgreSQL.
- ❖ Deployed workflows on a **lightweight single-node Airflow setup**.
- Developed Python tasks for data cleaning (removing duplicates, formatting, normalization).
- * Ran pipelines on a single node Airflow Setup (LocalExecutor) to keep infrastructure lightweight.

• Introductory Airflow Projects (Yess Infotech) –

- ❖ Loading and cleaning CSV data into SQL databases.
- ❖ Guided learners through **POC projects** in Airflow to demonstrate workflow automation.
- ❖ Created sample Airflow DAGs as part of Python/SQL training programs.
- ❖ Taught students the basics of DAGs, Operators, Sensors, XComs, and Scheduling, providing early exposure to workflow orchestration platform.
- * Classification models to predict student conversions; Flask/Streamlit deployment.

EDUCATION

•	Masters in Computer Science	
	International University of Applied Sciences Germany	2022 - 2024
•	Master of Technology in Digital communication	
	Sagar Institute of Research & Technology Indore	2015-2017
•	Bachelor of Engineering in Electronics and Communication	
	Jawaharlal Institute of Technology Borawan	2010-2013

INTERNSHIPS & CERTIFICATIONS

•	Astronomer Certification for Apache Airflow 2 Fundamentals	Sept 2025
•	Data Analytics and Machine Learning Puneri Pattern Pvt. Ltd. Pune India	Jan 2022 - June 2022
•	Data Science with Python SimpliLearn	Apr 2021 - Sep 2021

LANGUAGES

- English (proficient) IELTS C1 certified.
- German (basic conversational) A2.