

Claire Pukas

PROFESSIONAL SUMMARY

Senior data professional specializing in design and architecture, data pipelines, database development, secure production workflows, and data stewardship. Rebuilds undocumented systems into controlled, traceable data environments across airline, utility and medical-device industries. Delivering error-free production runs, improved ETL processing efficiency and stability, and documented data systems. Combines role-based access control, end-to-end lineage, reference data governance, and audit-ready validation with engineering leadership and technical mentorship. Azure Data Certified. Currently building AI applications. MS Fabric DP-700 certification scheduled for October 24th, 2026.

PROFESSIONAL EXPERIENCE

Independent AI Development and Job Search | 05/2026 - Present

Designed agentic applications with Claude Code using agent orchestration, subagents, RAG, MCPs, APIs, skill and context management, graphing and loop engineering, scheduled routines, and persistent memory.

- Established quality gates on every generated document; validation scripts check each output for hallucinations.
- Scheduled Python collectors and AI pipelines across 190+ REST endpoints that extract, score, and document data collected.
- Earned Microsoft Certified: Azure Data Fundamentals and the Databricks Fundamentals accreditation; completed eight Collibra University courses and Azure AI Foundry training; Fabric DP-700 exam scheduled 10/24/2026.

Career Pause | 01/2024 - 05/2026

Pause from full-time employment for family illness / elder caregiving.

Lead Technical Architect | Delta Air Lines | 11/2021 - 12/2023

Owned the fare-filing platform: the Python application and the reference taxonomy that read, validated and filed fare codes and rules with ATPCO across four geographic entities, multiple airlines and 36 tariffs.

- Identified exposed ATPCO secret credentials within days of joining and closed the exposure immediately: compiled the application, removed workstation interpreters, and established access controls around all production workflows.
- Reconstructed undocumented business requirements with Revenue Management users; strengthened validation and resolved 63 defects in the first year, resulting in continuous error-free production runs.
- Managed fare-code definitions and validation rules, extending the application as pricing rules changed and supporting automated SFTP delivery.
- Established Git, Azure DevOps, and Agile practices; wrote and taught the curriculum that helped new hires navigate unfamiliar processes.
- Won funding for a Revenue Management mentorship program through an innovation competition; presented to executives and recruited the implementation team.

Senior Database Developer | Georgia System Operations Corporation | 06/2016 - 10/2021

Owned the data, back end logic layer and data flows behind energy accounting, reconciliation, and settlement for Georgia's electric membership cooperatives; engineered plant, scheduling, and trading changes into automated production processes.

- Defined a refactoring and ETL modernization approach for a legacy environment; clarified application and database responsibilities, eliminated the outstanding defect backlog, and introduced no new defects during the refactor.
- Built source-to-user data lineage and used dependency analysis to guide upstream schema changes before approval, protecting downstream processes and reports.
- Designed transactional daily loads with exception logging and controlled reruns to prevent partial data updates; automated plant onboarding across systems using thousands of reference records per plant; both at 100% accuracy.
- Improved ETL processing efficiency and execution time by 45%; introduced documented requirements, Agile work tracking, and Azure DevOps version control to improve delivery discipline.

Business Intelligence Developer / Data Engineer | SP Richards | 07/2015 - 06/2016

Delivered warehouse modeling, ETL, and reporting on the central corporate data team supporting order processing, monthly financials, and the SOX reporting cycle.

- Modeled star and snowflake schemas on an Oracle enterprise data warehouse and built Pentaho ETL pipelines across relational and MongoDB sources for structured and semi-structured data.

- Designed an automated process to replace 100+ step manual monthly close; owned custom reporting and the supporting data structures.
- Introduced the team to Git version control and trained new teammates in Agile.

SQL Developer / Data Validation Team Lead | Arthrex via Modis | 02/2013 - 07/2015

Designed the migration validation strategy for an FDA-regulated data migration from the legacy system to Oracle Agile PLM, preserving component genealogy and material-lot traceability for medical devices from material procurement through device implantation.

- Directed the data migration validation across conversion cycles, documented exceptions, and reviewed findings with business stakeholders, contributing to zero-defect production migrations.
- Reverse-engineered an undocumented German-language SAP ERP schema through its relational structure, producing source-to-target mappings used by the ETL and validation teams.
- Hired and led five offshore engineers; set delivery standards and approved queries and tests for logic, accuracy, and performance.

Senior Programmer Analyst, Business Intelligence | Pegasus Solutions | 02/2009 - 02/2013

Owned the analytics environment for Hotel Management Intelligence: a library of 200+ standard and custom reports that scaled to thousands of users worldwide.

- Engineered the schemas, views, triggers, functions and stored procedures behind the BI platform and developed Oracle PL/SQL and Jasper iReport reporting, including billable custom reports requested by hotel properties.
- Trained two junior developers in data integrity, normalization, schema modeling, and reporting tools; led Scrum planning, code reviews, and backlog prioritization and authored QA test cases.

TECHNICAL SKILLS

Cloud and Lakehouse Platforms: Microsoft Azure, Azure SQL, Microsoft Fabric, OneLake, Databricks

Languages: SQL, T-SQL, PL/SQL, Python, R

Databases and Data Architecture: SQL Server, Oracle, MySQL, MongoDB (NoSQL); data modeling (dimensional, star and snowflake schemas, ERDs, normalization), data warehousing, OLTP and OLAP workload separation, semantic models, schema refactoring and modernization; packages, procedures, functions, views, triggers, CTE, windowing functions

Data Pipelines and Integration: ETL/ELT pipeline design (SSIS, Pentaho, Python, Oracle SQL*Loader), REST API and JSON ingestion, SFTP, scheduling and orchestration, monitoring and error handling, transactional batch loads, source-to-target mapping, data migration, medallion architecture

Data Governance and Stewardship: Data lineage and impact analysis, reference and master data, schema ownership, validation and reconciliation, root cause analysis, data quality standards, change control, metadata management and data catalog, audit evidence, SOX and FDA compliance

Security and Access Controls: Role-based access control (RBAC), SQL Server role and permission design (GRANT/REVOKE), Azure DevOps permission structures, credential and access-control remediation

Business Intelligence: Power BI, DAX, Power Query/M, SSRS, Oracle Reports, Crystal Reports, iReport, self-service reporting, dashboards

Engineering Delivery and Tools: Git, Azure DevOps, CI/CD, SSMS, Visual Studio Code, Notebooks, SQL Developer, SQL Developer Data Modeler, PL/SQL Developer, Redgate SQL Toolbelt, Asana, Rally

Quality and Technical Leadership: Unit, integration and end-to-end testing, test-driven development (TDD), UAT, code review, SDLC, Agile and Scrum (Scrum Master rotations), CMMI, technical product ownership, requirements gathering, stakeholder management, executive presentations, hiring, mentoring and training

AI Automation: Agentic system design, Claude Code, MCP (Model Context Protocol) tool design, context and skill file architecture, memory management, scheduled multi-agent pipelines, RAG, deterministic calculation with AI-assisted reading and routing, human-in-the-loop review, model selection on instruction adherence and cost, dependency vetting

CERTIFICATIONS

Microsoft Certified: Azure Data Fundamentals | [Certificate ID 429204-A9V525](#)

Databricks Fundamentals | Databricks Academy Accreditation [Credential ID 187123911](#)

Microsoft Fabric Data Engineer (DP-700) | In progress, test date 10/24/2026

Big Data and Data Analytics Certificate | Emory University Continuing Education and Consort Institute | 80 hours

CONTINUING EDUCATION

Colibra University | 8 courses to date

Azure AI Foundry | Microsoft Virtual Training Days 2026 | Generative AI and Agentic AI

Azure AI Foundry | Microsoft Virtual Training Days 2026 | LLMs and RAG

MS Copilot | Microsoft Virtual Training Days 2026 | Chat Bots

EDUCATION

Computer Information Systems Certificate Program | Tulane University, University College | 30 credit hours

Bachelor of Science, Sociology | Towson University