

Tirth Shah

(979) 635 2045 | tirth.shah@tamu.edu | linkedin.com/in/tirth-chirayu-shah | tirthshah.com

EDUCATION

Texas A&M University, College Station, Texas Master of Science in Management Information Systems	Aug 2024 – May 2026 GPA: 3.83/4.00
Sardar Vallabhbhai Patel Institute of Technology, Gujarat Bachelor of Engineering (BE) in Computer Engineering	Jul 2017 – Jul 2021 GPA: 3.95/4.00

WORK EXPERIENCE

Utilities and Energy Services Graduate Assistant – Data & Automation Engineer	May 2025 – Nov 2025
<ul style="list-style-type: none">Orchestrated Python ETL for daily energy, weather, and 50,000+ real time sensor feeds from 15 heterogeneous sources into structured SQL automating Power BI reporting, with schema validation, reduced manual work 95% and saving 300+ hrs./yearDesigned a week-ahead forecast workflow automation for integrating ERCOT market price, weather, and solar generation with selenium, pandas, openpyxl, increasing forecast accuracy by 30% and supporting cost optimization by 20% annuallyDigitized billing through an OCR pipeline (pytesseract, pandas, openpyxl) and published a YoY dashboard, reaching 97% accuracy, shortening processing from 2 hours to 6 minutes, removing manual entry, & flagging 3% of billing outliers for review	
Black Tie Concierge LLC AI & Data Intern – Digital Product Strategy	May 2025 – Aug 2025
<ul style="list-style-type: none">Developed a luxury travel platform (Next.js, TypeScript, Supabase; Stripe, Google Maps & Resend API) that generated \$10K+ revenue, & 3x traffic growth, and 150+ leads in 3 months, reinforced by SEO/GEO strategies & instant-quotes generationAutomated the post-booking pipeline using AI(NLP) + low-code(n8n): confirmation on booking, receipt on payment (auto bill #), calendar invite and auto driver assignment—shrinking cycle time by <1 minute & cutting communication errors by ~90%Built scalable database for users, rides, & payments; with real-time ingest & data archiving, optimizing data hunt time ~80%	
Tata Consultancy Services (Equifax) Data Engineer (POC Lead)	Aug 2021 – Aug 2024
<ul style="list-style-type: none">Modernized 60+ legacy SAS Code to Python Scripts (pandas/NumPy, I/O, and multiprocessing), added standardized configuration, and logging, cutting runtime 80%, compute cost 50%, and tripling peak-hour throughput while meeting SLAsReplaced 15+ excel report with interactive dashboards reducing errors by 90% and boosting data-driven decisions by 15%Implemented QA with Python validation script (pandas, openpyxl/pywin32) compared SAS vs. Python outputs and flagged outliers and produced audit reports, eliminating ~90% manual checks and compressing test cycles from 3 days to 2 hrs	

Migration Analyst

<ul style="list-style-type: none">Migrated On-Prem workflows to GCP, building data-fabric that unified 7 external data aggregators with address standardization, match-key dedupe; increased hit ratio by 45% and reduced lookup by 93% eliminating cross-table travelsStandardized heterogeneous client files via a GCP ETL jobs (clean PII, address/ZIP normalization, dedupe) into canonical schemas, enabling reliable matching at scale and increasing hit rate by 45% while reducing inquiry turnaround 93% timeCollaborated with cross-functional teams to align AI and Data strategy with business goals, improving client data quality

PROJECTS

Document Classifier[[Github]]|[[Video]]: Multi-modal AI classifier using Claude Haiku 3.5 and Gemini Flash 2.0 with dynamic prompt trees to classify 100+ regulatory documents at 98% accuracy across 4 sensitivity levels with PII detection, HITL and audit citations

CHAT-C.P.T. | [[Demo]]: An agentic AI solution made using RAG, LangChain, FastAPI, and Streamlit to simplify semester degree planning for prospective students using 24/7 personalized chatbot with scalable and secure infrastructure along with guardrails

Market Basket Analysis[[Article]]: Built an EC2 data platform (MariaDB/MongoDB; SQL views/triggers/stored procedure) and applied ML model to expose customer spend patterns and product pairing, improving efficiency 30% and lifting sales 30% YoY

Exploratory Data Analytics[[GitHub]]|[[Video]]: Created dashboards to support data-driven decisions, predicting product sales and strategically targeting a 20% revenue increase by translating complex data into actionable business insights using Microsoft Excel

TECHNICAL SKILL & CERTIFICATIONS

Technologies: Python, C, SQL, TypeScript/JS, Java, Bash; Postgres/MySQL/SQL Server; Snowflake; AWS, GCP, Azure

Tools: Airflow, dbt, Kafka; Docker, Kubernetes; GitHub Actions (CI/CD), Serverless; Power BI, Excel, GitHub, Tableau, Fast API

Certification: Microsoft Azure Associate [DP-203],[AZ-104], Fundamental [DP-900],[AI-900], Professional Scrum Master [PSM 1]

LEADERSHIP & ACHIEVEMENT

- President, Buddy Connect @TAMU: Led industry speaker and resume sessions for students, driving impactful networking
- IGSA @TAMU: Coordinated 20+ cultural events reaching 10000+ student, driving community engagement by teamwork