Germán Neironi

Cloud Data Engineer | AWS Solutions Architect | AI/ML Integration Specialist

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Professional Summary

Highly accomplished **Cloud Data Engineer** with over **15 years of progressive experience** across healthcare informatics, business intelligence, enterprise data systems, and SaaS platform development. Recognized expert in designing and implementing scalable AWS data infrastructures, complex ETL/ELT processes, and production-grade analytical solutions that drive measurable business outcomes.

Core Expertise

- **Full-Stack Cloud Architecture**: Deep expertise in AWS ecosystem (CDK, Lambda, ECS Fargate, RDS, DMS, Bedrock, S3, Glue, Athena, Redshift, DynamoDB, Step Functions, SQS, EventBridge, CloudFront) and Terraform Infrastructure-as-Code
- **Advanced Data Engineering**: Design and implementation of hybrid serverless architectures, real-time data pipelines, multi-source ETL systems, and optimized data lake architectures
- **AI/ML Integration**: Production experience integrating AWS Bedrock (Claude 3.5 Sonnet), building LLM-powered applications, and implementing multi-model AI consensus systems
- **Modern Development Stack**: FastAPI, Next.js 14, Vue.js, TypeScript, Python, PostgreSQL, with CI/CD automation via GitHub Actions
- **Leadership & Strategy**: Proven track record founding SaaS startup (CloudPrune AI), leading cross-functional teams of 26+ professionals, and managing enterprise-scale transformation projects

Professional Differentiators

Currently leading cloud data projects at **Argeniss Software** while simultaneously operating as **Founder & Technical Lead** of **CloudPrune AI**, a production FinOps SaaS platform validated with **$256K/year savings detection** in real fintech scenarios. Extensive experience working with distributed teams across multiple time zones and countries using modern collaboration tools (Slack, Discord, Teams, Jira, Figma).

Results-oriented professional who translates complex data challenges into scalable, production-ready solutions. Strategic thinker with diplomatic approach to stakeholder management and commitment to continuous learning and emerging technologies.

Education

Bachelor's Degree in Business Management
Universidad Autónoma de Entre Ríos (UADER), Paraná, Argentina | 2017

Professional Certifications & Advanced Training

AWS Cloud Services (2024)

- Introduction to Amazon Kinesis Analytics (LATAM Spanish)
- Amazon EMR Getting Started
- AWS Glue Getting Started
- Amazon Athena
- Amazon QuickSight Getting Started & Visualization
- AWS IoT Analytics Getting Started
- Amazon Redshift Getting Started

Microsoft Azure Ecosystem (2023)

- Get started with data engineering on Azure
- Microsoft Azure Fundamentals (Cloud concepts, Architecture, Management)
- Data engineering with Apache Spark on Azure Synapse
- Data analysis solutions with serverless SQL groups on Azure Synapse
- Data modeling, querying and exploring on Azure Synapse
- Data storage & transformation with Data pipelines on Azure Synapse Analytics

Machine Learning & AI (2022)

- Machine Learning Engineer - Anyone AI
- Introduction to AI (Elements of AI) - University of Helsinki

Project Management & Methodologies (2020-2021)

- Project Manager Officer - National Technological University (FRBA)
- Scrum Foundation Professional Certificate - CertiProf
- Scrum Grand Master - National Technological University (FRBA)

Language Proficiency

- C1 English Language - EFSET (2023)
- B2.2 English - Freedom Private Institute (2023)

IT Service Management

- ITIL® Foundation Certificate in IT Service Management - PeopleCert (2018)
- ITIL V3® - National Technological University (FRBA)

Database & Programming Fundamentals (2016-2020)

- Database programming (PL-SQL Language) - National Technological University
- Database Fundamentals - National Technological University
- Programming Fundamentals - e-Learning Center UTN FRBA
- R Language Programmer - Edutin
- AWS Cloud Practitioner Essentials, CloudFormation, ECS, EC2, Serverless development

Technical Skills

Cloud Platforms & Infrastructure

AWS (Advanced): CDK, Lambda, Step Functions, ECS Fargate, AWS DMS, AWS Bedrock (Claude API), API Gateway, S3, Glue, Athena, Amazon Redshift, DynamoDB, SQS, SNS, KMS, EventBridge, Secrets Manager, CloudFront, Cost Explorer, SageMaker Canvas, Lake Formation, IAM, CloudWatch
Infrastructure as Code: Terraform, AWS CDK
Azure: Data Factory, Databricks, Synapse Analytics, Fundamentals certified
Containerization & Orchestration: Docker, Container-based Lambda deployments

Programming & Scripting Languages

Expert: Python (Pandas, NumPy, PyArrow, Boto3), SQL (T-SQL, PL/SQL, PostgreSQL)
Proficient: TypeScript, JavaScript, R, Scala
Working Knowledge: VB.NET

Web Frameworks & APIs

FastAPI, Next.js 14, Vue.js, REST API Design, OAuth2, Stripe API Integration

Databases & Data Storage

Relational: PostgreSQL, MySQL, SQL Server, Oracle, Amazon RDS, Amazon Redshift
NoSQL: MongoDB, DynamoDB
Data Formats: Parquet, JSON, CSV, Avro
Data Warehousing: Star/Snowflake schemas, dimensional modeling, partitioning strategies

Data Engineering & ETL

ETL/ELT Tools: AWS Glue, Azure Data Factory, Pentaho Data Integration, SSIS, Custom Python pipelines
Big Data: Apache Spark, PySpark, Databricks
Data Integration: MIRTH Connect, Mule, HL7/FHIR standards
Stream Processing: Amazon Kinesis, SQS-based event-driven architectures

AI/ML & Advanced Analytics

Generative AI: AWS Bedrock (Claude 3.5 Sonnet, Haiku, Nova models), Prompt Engineering
ML Frameworks: Scikit-learn, PyTorch, Keras, TensorFlow, XGBoost, LightGBM
ML Deployment: SageMaker Canvas, Docker-based model serving, API integration
Statistical Analysis: Hypothesis testing, regression analysis, time series forecasting

Business Intelligence & Visualization

Power BI, Tableau, Amazon QuickSight, Pentaho, Google Data Studio, SSRS, SSAS

DevOps & CI/CD

Version Control: Git, GitHub, Bitbucket
CI/CD: GitHub Actions, automated testing pipelines

Monitoring: CloudWatch, Application Insights
Security: KMS encryption, IAM policy design, Security Hub compliance, least privilege principles

Methodologies & Frameworks

Agile/Scrum (Certified), DevOps, ITIL, Infrastructure as Code (IaC), Test-Driven Development, Documentation-as-Code

Professional Experience

CloudPrune AI | *Founder & Technical Lead*

July 2024 - Present | SaaS Startup (Side Project) | Remote

Founded and built production-ready **FinOps SaaS platform** from concept to validated MVP in 4 months, automating AWS cost optimization through AI-powered infrastructure-as-code generation.

Key Responsibilities & Achievements

Product Development & Architecture:

- Architected and deployed complete **hybrid serverless architecture** combining Lambda (FastAPI API layer) with ECS Fargate (long-running scan workers) and RDS PostgreSQL for data persistence
- Designed and implemented **8 specialized resource analyzers** (EC2, EBS, S3, RDS, Zombie Services, CloudWatch Logs, Secrets Manager, Snapshots) achieving **20-40% average cost savings detection**
- Built **AI-powered CDK code generation system** using Claude API (Anthropic) for automated implementation of optimization recommendations
- Developed complete **REST API** with authentication (Auth0), role-based access control, and multi-tenant support

Business Model & Monetization:

- Designed innovative **gainshare pricing model** (15% of detected savings) with Stripe payment integration
- Implemented automated **recommendation unlock system** tied to payment processing
- Created customer dashboard for real-time savings tracking and CDK code downloads

Technical Infrastructure:

- Deployed full **CI/CD pipeline** via GitHub Actions with automated testing and multi-environment deployment
- Implemented comprehensive monitoring and alerting using CloudWatch
- Configured **multi-AZ deployment** for high availability
- Established data encryption at rest and in transit using KMS

Validation & Business Development:

- Validated platform with **real fintech scenario**: Detected **$256K/year potential savings** across 249 EC2 instances in 3 AWS accounts (72 actionable recommendations)
- Registered **USPTO trademark** (Serial: 99585602)
- Established company **LinkedIn presence** and go-to-market materials
- Deployed production environment: **app.cloudpruneai.com**

Technical Stack: AWS (CDK, Lambda, ECS Fargate, RDS PostgreSQL, S3, SQS, Cost Explorer, CloudWatch, KMS), FastAPI, Next.js 14, TypeScript, Python, Docker, Auth0, Stripe API, GitHub Actions

Quantifiable Impact:

- 4-month MVP delivery (concept to production)
- $256K annual savings detected in validation
- 8 production-grade analyzers
- 72 optimization recommendations generated
- 20-40% average cost reduction potential

Argeniss Software | *AWS Data Integration Engineer*

October 2025 - Present | Fintech Company | Remote

Lead engineer for enterprise-scale **automated database replication system** supporting 10-30 SQL Server databases with plans to expand to MongoDB and REST API sources.

Key Responsibilities & Achievements

System Architecture & Design:

- Architected complete **automated DMS (Database Migration Service) system** replicating SQL Server databases to Amazon Redshift with **Change Data Capture (CDC)** achieving **30-120 second latency**
- Designed **multi-source extensible architecture** supporting SQL Server (via DMS), MongoDB (Change Streams), and REST APIs (Salesforce, NetSuite) through unified orchestration layer
- Created **reusable Terraform module library** (DMS instance, endpoints, KMS keys) following Infrastructure-as-Code best practices and semantic versioning

Orchestration & Automation:

- Built sophisticated **Step Functions workflow** with Lambda (Python) orchestration enabling **zero-touch database onboarding** (3 commands: configure, authenticate, execute)
- Implemented **DynamoDB-driven configuration catalog** for centralized source management and metadata tracking
- Developed **S3 data lake architecture** with Redshift Spectrum integration for querying semi-structured data (JSON/Parquet) alongside relational tables

Security & Compliance:

- Deployed **multi-AZ infrastructure** with automatic failover capabilities
- Achieved **AWS Security Hub compliance** with automated security scanning
- Implemented **KMS encryption** with automatic key rotation policies
- Configured **CloudWatch monitoring** with custom metrics and automated alerting

Operational Excellence:

- Delivered **60-70% infrastructure reusability** across source types through modular design
- Reduced database onboarding time from **weeks to days** via automation
- Created comprehensive **documentation and runbooks** for operations team
- Implemented automated testing for infrastructure changes

Technical Stack: AWS (DMS, Lambda, Step Functions, DynamoDB, S3, Amazon Redshift, Glue, Athena, KMS, Secrets Manager, CloudWatch), Terraform, Python, SQL Server, MongoDB, REST APIs, Security Hub

Quantifiable Impact:

- 10-30 databases replicated with 30-120 sec latency
- 60-70% infrastructure code reusability
- 3-command onboarding process (previously multi-week manual setup)
- Multi-AZ deployment with 99.9% uptime target

- Zero data loss with CDC implementation

Argeniss Software | *AWS Data Engineer*

March 2025 - October 2025 | E-learning & Healthcare Company | Remote

Sole engineer responsible for designing and implementing complete **educational analytics platform** serving thousands of nursing students with real-time performance insights and AI-powered recommendations.

Key Responsibilities & Achievements

Data Pipeline & ETL:

- Architected end-to-end **ETL system** extracting student performance data from MySQL to **S3 Data Lake** with Parquet optimization and user-based partitioning strategy
- Implemented **EventBridge-scheduled daily extraction** (24-hour cadence) with automated Glue Crawler management for schema evolution
- Developed **real-time update pipeline** using SQS for user-specific data refreshes without full ETL re-runs, reducing update latency from hours to minutes

API Development:

- Built production **dynamic REST API** (API Gateway + Lambda + Athena) supporting **configurable analytics endpoints** with zero-code deployment (DynamoDB-driven configuration)
- Implemented **auto-generated API documentation** endpoint (`/endpoints`) listing all available analytics with calculation methods and examples
- Achieved **sub-second query response times** through optimized Athena partitioning and query patterns
- Designed multiple response formats: heatmaps, time series, performance summaries, detailed drill-downs

AI/ML Integration:

- Developed **LLM-powered analysis system** using **AWS Bedrock (Claude 3.5 Sonnet)** for personalized educational recommendations
- Implemented **NCLEX-RN exam question generator** with iterative AI feedback loop for quality improvement

- Created **methodology configuration system** via DynamoDB enabling dynamic prompt customization without code deployment
- Built **batch processing system** for flashcard generation with OAuth2 integration to client systems

Frontend & User Experience:

- Designed and deployed **Vue.js frontend** for NCLEX question generator with CloudFront CDN distribution
- Implemented basic authentication and session management
- Created intuitive UI for selective field regeneration and feedback submission

Infrastructure & DevOps:

- Deployed **multi-stack CDK infrastructure** (3 independent stacks: ETL, API, LLM) with cross-stack references
- Implemented **6 production Lambda functions** (containerized) with proper error handling and logging
- Configured **EventBridge schedulers** for automated maintenance tasks
- Established **Secrets Manager** integration for secure credential management

Technical Stack: AWS (CDK, Lambda, API Gateway, Bedrock Claude 3.5 Sonnet, Athena, Glue, S3, DynamoDB, SQS, CloudFront, EventBridge, Secrets Manager, CloudWatch), Python, MySQL, Parquet, Vue.js, Docker, OAuth2

Quantifiable Impact:

- 300+ student records processed per batch
- Sub-second API query response times
- 6 production microservices deployed
- 10+ analytics endpoints configured
- 24/7 system availability with automated monitoring
- Zero data breaches (FERPA compliant)

Argeniss Software | *AWS Data Warehouse Engineer*

February 2025 - Present | Multiple Clients | Remote

Project 1: API-to-Data Lake Pipeline (Confidential Client)

Responsibilities:

- Built **dual-Lambda architecture** for API data extraction and transformation using AWS CDK
- Implemented **incremental processing system** with timestamp-based change detection to prevent data duplication
- Developed automated **JSON-to-Parquet conversion** with partitioned storage strategy (year/month/day hierarchy)
- Configured **AWS Glue Crawler** for automated schema cataloging and Athena query optimization
- Designed **pagination system** for large-volume API data extraction with exponential backoff retry mechanisms
- Integrated **Parameter Store** for secure credential management and **S3 server-side encryption** (KMS)
- Created **control file system** for processing state management and data lineage tracking

Technical Stack: AWS (CDK, Lambda, S3, Glue, Athena, Parameter Store, KMS), Python, Parquet

Impact:

- 70% reduction in storage costs (JSON → Parquet)
- 10x faster Athena queries through partitioning
- Automated daily processing with zero manual intervention

Project 2: SageMaker Forecast System (Confidential Client)

Responsibilities:

- Implemented **forecast infrastructure** using **SageMaker Canvas models** for predictive analytics
- Created **dual forecasting system** supporting both short-term (weekly) and long-term (quarterly) predictions
- Configured **S3 data flows** with input/output separation for model training and inference
- Set up **GitHub Actions CI/CD pipeline** with automated testing
- Implemented **multi-environment deployment** (dev/staging/prod) with CDK parameterization

Technical Stack: AWS (SageMaker Canvas, S3, Lambda, CDK), Python, GitHub Actions

Impact:

- Automated forecast generation reducing manual effort by 95%
- Multi-environment deployment capability
- Continuous delivery pipeline

Project 3: Healthcare Data Lake (Confidential Client)

Responsibilities:

- Designed and implemented **serverless data processing architecture** for medical records using AWS CDK
- Developed **Python Lambda functions** for JSON to Parquet data transformation across multiple medical record types
- Implemented **robust error handling and logging** with CloudWatch integration
- Designed and implemented **data cataloging system** using AWS Glue with automatic schema discovery
- Configured **IAM roles and policies** following least privilege principle
- Implemented **data encryption** using KMS and granular access control with Lake Formation

Technical Stack: AWS (CDK, Lambda, S3, Glue, Lake Formation, KMS, IAM), Python, Parquet

Impact:

- Significant reduction in storage costs through format optimization
- Improved query performance via Parquet and efficient partitioning
- HIPAA-compliant security implementation

Argeniss Software | *Bedrock AI Analysis Engineer*

September 2024 - February 2025 | Innovative Client | Remote

Designed and deployed **production multi-model AI consensus system** for automated analysis workflows.

Key Responsibilities & Achievements

AI Architecture:

- Designed complete **multi-model AI pipeline** using **AWS Bedrock** with **4 concurrent models**: Claude Sonnet, Claude Haiku, Nova Lite, Nova Pro
- Built serverless architecture with **Step Functions** orchestrating **3-stage workflow**: data preprocessing, parallel AI analysis, consensus output generation
- Implemented **EventBridge triggers** for automated CSV processing handling **300+ records per batch**

System Development:

- Developed **Lambda functions** for multi-model consensus analysis with conflict resolution logic

- Created **structured output generation** supporting both JSON and CSV formats with schema validation
- Implemented **DynamoDB job tracking system** with complete lifecycle management (queued, processing, completed, failed)
- Built **retry mechanisms** with exponential backoff for API rate limiting

Performance & Reliability:

- Achieved **30-60 second processing time per account** with cross-model validation
- Implemented **parallel execution** of AI models for maximum throughput
- Configured **CloudWatch alarms** for job failures and performance degradation

Technical Stack: AWS (Bedrock Claude/Nova models, Step Functions, Lambda, DynamoDB, S3, EventBridge, CloudWatch), Python

Quantifiable Impact:

- 300+ accounts processed per automated run
- 4-model consensus validation improving accuracy
- 30-60 second per-account processing time
- 95%+ job success rate

Scale AI | *AI Quality Assurance Engineer*

August 2023 - September 2024 | Remote

Contributed to training and improvement of **generative AI models** through systematic code review and quality assurance processes.

Key Responsibilities & Achievements

Model Training & Evaluation:

- Performed comprehensive **code review of AI model outputs** across multiple programming languages
- Created **high-quality code snippets with detailed reasoning** to improve model response accuracy
- Developed **test cases and edge cases** for model evaluation
- **Identified and documented bugs** in model behavior with reproduction steps

Quality Assurance:

- Established **quality standards** for AI-generated code outputs
- Reviewed model responses for correctness, efficiency, and best practices adherence
- Provided **feedback on prompt engineering** for improved model responses
- **Escalated complex technical issues** to ML engineering teams

Cross-Functional Collaboration:

- Worked with ML engineers to implement model improvements
- Contributed to documentation of model capabilities and limitations
- Participated in calibration sessions to ensure consistency across QA team

Technical Stack: Python, NumPy, Pandas, Scikit-learn, Keras, PyTorch, Docker, AWS

Impact:

- Reviewed 1000+ model outputs
- Contributed to improvement of model accuracy
- Identified critical bugs leading to model retraining

NTB Solutions | *Senior Data Analyst*

August 2018 - February 2024 | Multiple Healthcare Clients | Remote/Hybrid

Led data analysis and integration projects for **healthcare institutions across multiple countries** (Argentina, Paraguay, Uruguay), focusing on improving patient care, optimizing resources, and enabling data-driven decision-making.

Key Responsibilities & Achievements

Healthcare Analytics & BI:

- Analyzed complex healthcare data from **multiple sources** (EHR, hospital management systems, government registries, insurance claims)
- Built comprehensive **ETL processes** using Azure Data Factory, Databricks Notebooks, Scala, and Python
- Created **executive dashboards** using Power BI, Pentaho, and Tableau for C-level healthcare executives
- Designed and implemented **health information systems** (HIS, LIS, RIS) integrations

Data Integration & Interoperability:

- Integrated disparate healthcare systems using **MIRTH Connect middleware**
- Implemented **HL7-FHIR health interoperability standards** for cross-system communication
- Managed **SQL and NoSQL databases** (MySQL, Oracle, PostgreSQL, MongoDB) for multi-facility healthcare networks
- Developed **Pentaho Data Integration ETL processes** for automated data synchronization

Stakeholder Management:

- Consulted directly with **healthcare executives, clinical staff, and IT teams** to define project goals and success criteria
- Translated complex technical concepts into actionable business insights
- Managed stakeholder expectations across distributed teams and time zones
- Conducted training sessions for end-users on BI tools and dashboards

Major Achievement - Revenue Recovery System:
Built **custom reporting solution using Pentaho Report Designer** that identified previously uncontrolled revenue streams, recovering **approximately $6 billion pesos annually** (2021 baseline) for healthcare institution. System automated detection of billing discrepancies and insurance claim gaps.

Technical Stack: Azure (Data Factory, Databricks), Python, Spark, PySpark, SQL, Pentaho (Data Integration, Report Designer), Power BI, Tableau, MIRTH Connect, MySQL, Oracle, PostgreSQL, MongoDB, HL7-FHIR

Quantifiable Impact:

- $6B+ pesos annual revenue recovery through automated reporting
- 15+ healthcare facilities integrated across 3 countries
- 100+ dashboards and reports deployed
- 50+ ETL processes automated

Anyone AI | *Machine Learning Engineer* (Part-Time)

July 2022 - December 2022 | Educational Projects | Remote

Completed intensive **machine learning bootcamp** with multiple real-world projects demonstrating end-to-end ML development capabilities.

Projects Completed

Sentiment Analysis System:

- Built **sentiment analysis model** for movie streaming service product reviews
- Implemented **word embeddings** for text vectorization (Word2Vec, GloVe)
- Achieved **85%+ accuracy** on test dataset
- Deployed via **Flask API** with Docker containerization

Image Classification Model:

- Developed **CNN-based image classifier** for vehicle make and model prediction
- Implemented **data augmentation** to improve model generalization
- Used **transfer learning** with pre-trained models (ResNet, VGG)
- Achieved **90%+ accuracy** on validation set

Credit Risk Analysis:

- Built **binary classification model** for loan default prediction
- Performed **feature engineering** and **hyperparameter tuning**
- Implemented **SMOTE** for handling class imbalance
- Deployed predictive model with **scikit-learn pipeline**

Salary Prediction:

- Developed **regression model** for salary prediction based on job features
- Performed **exploratory data analysis** and feature selection
- Implemented **ensemble methods** (Random Forest, XGBoost)
- Created **API endpoint** for real-time predictions

Technical Stack: Python, Scikit-learn, Keras, PyTorch, TensorFlow, Pandas, NumPy, Docker, Flask, Jupyter Notebooks

Skills Developed:

- End-to-end ML model development lifecycle
- Model deployment and API integration
- Docker containerization for ML models
- MLOps best practices

Sanatorio la Entrerriana | *Data Analyst & IT Manager*

July 2008 - August 2018 | Paraná, Argentina | On-site

Led **digital transformation initiative** for large healthcare institution (300+ beds, 1000+ employees) including implementation of comprehensive health information system and establishment of data-driven culture.

Key Responsibilities & Achievements

Major Project - HIS Implementation:

- Led implementation of **enterprise-wide health information system** involving **100% organizational cultural change**
- Successfully rescued **declining implementation project** through strategic leadership and stakeholder management
- Managed **cross-functional team** of clinical and technical staff
- Coordinated **change management** across all departments (clinical, administrative, financial)

Data Analysis & Business Intelligence:

- Established **data analytics function** from ground zero
- Created **executive dashboards and reports** using Power BI and Google Data Studio
- Performed **ad-hoc analysis** for clinical and administrative decision-making
- Developed **KPIs and metrics** for hospital performance monitoring

Database Management:

- Managed **Oracle databases** for mission-critical healthcare applications
- Optimized **SQL queries** for report generation and data extraction
- Implemented **backup and recovery procedures**
- Ensured **data security** and HIPAA-equivalent compliance

Leadership & Team Management:

- Built and led **IT team** from 2 to 8 professionals
- Managed **vendor relationships** for software and hardware procurement
- Coordinated with **clinical leadership** on technology adoption strategies
- Conducted **user training** for 1000+ employees

Major Achievement:
Successfully led transformation of **failing implementation project** into institution-wide success.

System remains in production use 12+ years later, supporting all clinical and administrative processes. Project involved complete organizational culture change from paper-based to digital workflows.

Technical Stack: Oracle Database, SQL, Power BI, Google Data Studio, Health Information Systems, Windows Server, Network Administration

Quantifiable Impact:

- 100% organizational process coverage
- 1000+ employees trained
- 12+ years system longevity
- Zero critical system failures post-implementation
- Complete elimination of paper-based clinical records

Featured Projects & Achievements

CloudPrune AI - Production FinOps SaaS Platform

Role: Founder & Technical Lead | **Timeline:** July 2024 - Present

Project Overview:
Production-ready FinOps SaaS platform that automatically analyzes AWS infrastructure and generates cost optimization recommendations with infrastructure-as-code implementation.

Technical Architecture:

- Hybrid serverless: Lambda (FastAPI) + ECS Fargate (scan workers) + RDS PostgreSQL
- 8 specialized analyzers: EC2, EBS, S3, RDS, Zombie Services, CloudWatch Logs, Secrets Manager, Snapshots
- AI-powered CDK code generation using Claude API
- Multi-tenant architecture with Auth0 authentication
- Stripe payment integration with gainshare pricing model

Key Achievements:

- **$256K/year savings detected** in fintech validation (249 instances, 3 accounts, 72 recommendations)
- **4-month MVP delivery** from concept to production
- **USPTO trademark registered** (Serial: 99585602)

- **20-40% average cost reduction** potential across analyzed accounts

Tech Stack: AWS (CDK, Lambda, ECS, RDS, S3, SQS, Cost Explorer), FastAPI, Next.js, TypeScript, Docker, Stripe, Auth0

Production URL: app.cloudpruneai.com

Multi-Source DMS Replication Architecture

Role: Lead AWS Data Integration Engineer | **Timeline:** October 2025 - Present

Project Overview:
Enterprise-scale automated database replication system supporting multiple source types (SQL Server, MongoDB, REST APIs) with unified orchestration.

Technical Architecture:

- AWS DMS for SQL Server CDC replication (30-120 sec latency)
- Step Functions orchestration with Lambda automation
- DynamoDB configuration catalog for centralized management
- Terraform modules for infrastructure reusability
- S3 data lake with Redshift Spectrum integration

Key Achievements:

- **60-70% infrastructure reusability** across source types
- **3-command onboarding** process (previously weeks of manual work)
- **Multi-AZ deployment** with automatic failover
- **Security Hub compliant** with automated scanning

Tech Stack: AWS (DMS, Step Functions, Lambda, DynamoDB, Redshift, S3, Glue), Terraform, Python, SQL Server

Impact: 10-30 databases replicated, weeks-to-days onboarding time reduction

Educational Analytics Platform with LLM Integration

Role: Solo AWS Data Engineer | **Timeline:** March 2025 - October 2025

Project Overview:
Complete educational data platform serving thousands of nursing students with real-time performance analytics and AI-powered insights.

Technical Architecture:

- MySQL-to-S3 ETL pipeline with Parquet optimization
- Dynamic REST API (API Gateway + Lambda + Athena) with DynamoDB configuration
- AWS Bedrock integration (Claude 3.5 Sonnet) for personalized recommendations
- NCLEX question generator with Vue.js frontend
- Real-time SQS update pipeline for user-specific refreshes

Key Achievements:

- **Sub-second API response times** through optimized Athena queries
- **300+ student records** processed per batch
- **6 production microservices** deployed via CDK
- **10+ analytics endpoints** with zero-code configuration
- **FERPA compliant** security implementation

Tech Stack: AWS (CDK, Lambda, Bedrock, API Gateway, Athena, Glue, S3, DynamoDB, SQS, CloudFront), Python, MySQL, Vue.js

Impact: 24/7 availability, automated insights for thousands of students

Healthcare Revenue Recovery System

Role: Senior Data Analyst | **Timeline:** 2018-2024 | **Client:** NTB Solutions

Project Overview:
Custom reporting solution that identified and automated recovery of previously uncontrolled healthcare revenue streams.

Technical Implementation:

- Built custom reports using Pentaho Report Designer
- Integrated data from multiple healthcare systems (EHR, billing, insurance)
- Implemented automated discrepancy detection algorithms
- Created executive dashboards for revenue tracking

Key Achievement:
$6 billion pesos annual revenue recovery (2021 baseline) through automated detection of billing discrepancies and insurance claim gaps.

Tech Stack: Pentaho (Report Designer, Data Integration), SQL, Oracle, MySQL

Impact: Billions in annual revenue recovered, ongoing automated monitoring

Core Competencies

Technical Leadership

- **Solution Architecture:** Design scalable, production-ready cloud architectures balancing performance, cost, and security
- **Technical Strategy:** Translate business requirements into technical roadmaps and implementation plans
- **Team Building:** Recruit, mentor, and develop high-performing technical teams
- **Vendor Management:** Negotiate and manage relationships with technology vendors and service providers

Data Engineering Excellence

- **Pipeline Design:** Create robust, fault-tolerant data pipelines with comprehensive error handling
- **Performance Optimization:** Optimize queries, data structures, and processing workflows for maximum efficiency
- **Data Quality:** Implement data validation, cleansing, and quality monitoring systems
- **Cost Optimization:** Design cost-effective data architectures through smart partitioning and storage strategies

AI/ML Integration

- **LLM Integration:** Production experience with AWS Bedrock (Claude models) for business applications
- **Prompt Engineering:** Design effective prompts for consistent, high-quality AI outputs
- **Model Deployment:** Deploy ML models via APIs with proper monitoring and error handling
- **Multi-Model Systems:** Build consensus systems leveraging multiple AI models for improved accuracy

Cloud Architecture

- **Hybrid Serverless:** Design architectures combining Lambda, containers, and managed services optimally
- **Infrastructure as Code:** Comprehensive CDK and Terraform expertise for repeatable deployments
- **Security & Compliance:** Implement secure architectures meeting industry standards (HIPAA, FERPA, Security Hub)
- **Cost Management:** Architect cost-effective solutions through right-sizing and resource optimization

Business & Leadership

- **Stakeholder Management:** Effectively communicate technical concepts to non-technical audiences
- **Project Management:** Deliver complex projects on time and within budget using Agile methodologies
- **Change Management:** Lead organizational transformation initiatives with cultural change components
- **Strategic Planning:** Align technology initiatives with business objectives and ROI requirements

Soft Skills & Professional Attributes

Collaboration & Communication

- **Remote Work Excellence:** 5+ years experience with distributed teams across multiple time zones
- **Cross-Functional Leadership:** Proven ability to work with clinical, business, and technical stakeholders
- **Written Communication:** Strong documentation skills with comprehensive technical writing experience
- **Verbal Presentation:** Confident presenter to executive leadership and technical audiences
- **Multilingual:** C1 English proficiency, native Spanish speaker

Problem-Solving & Innovation

- **Analytical Thinking:** Break down complex problems into actionable solutions

- **Creative Problem-Solving:** Find innovative approaches to technical and business challenges
- **Critical Thinking:** Evaluate multiple solutions objectively with data-driven decision-making
- **Continuous Learning:** Proactively learn emerging technologies and industry best practices
- **Growth Mindset:** Embrace challenges as opportunities for professional development

Professional Excellence

- **Detail-Oriented:** Meticulous attention to code quality, documentation, and system reliability
- **Goal-Driven:** Results-focused with track record of delivering measurable business outcomes
- **Diplomatic Approach:** Navigate complex organizational dynamics with professionalism
- **Strategic Thinking:** Balance short-term deliverables with long-term architectural vision
- **Team Player:** Collaborative approach fostering positive team dynamics and knowledge sharing
- **Accountability:** Take ownership of deliverables and proactively manage risks

Leadership & Management

- **Team Development:** Mentor junior engineers and facilitate knowledge transfer
- **Conflict Resolution:** Mediate technical disagreements and build consensus
- **Adaptability:** Thrive in fast-paced environments with changing priorities
- **Emotional Intelligence:** Navigate stakeholder concerns with empathy and professionalism
- **Decision Making:** Make informed technical decisions under uncertainty with calculated risk assessment

Tools & Collaboration Platforms

Development & Version Control: Git, GitHub, Bitbucket, Visual Studio Code, PyCharm, Jupyter Notebooks

Project Management: Jira, Trello, ClickUp, MS Project, Asana

Collaboration & Communication: Slack, Discord, Microsoft Teams, Zoom, Google Meet

Design & Documentation: Figma, Draw.io, Lucidchart, Confluence, Notion, Markdown

CI/CD & DevOps: GitHub Actions, Docker, Docker Compose, AWS CloudFormation, Terraform

Professional References

Available upon request.

Additional Information

Languages

- **Spanish:** Native proficiency
- **English:** C1 Advanced proficiency (EFSET certified)

Work Authorization

- **Argentina:** Citizen
- **Remote Work:** Available for remote positions globally

Availability

- **Current Status:** Open to full-time opportunities, consulting engagements, and contract work
- **Notice Period:** Negotiable based on project commitment
- **Work Schedule:** Flexible, experienced with multiple time zones (EST, PST, GMT)

Professional Networks

- Active member of AWS community forums
- Contributor to open-source projects (GitHub: gneironiar)
- Regular attendee of cloud computing and data engineering webinars

Last Updated: January 2026