Chris Cordaro

Technical Program Manager, AI and Data Science

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SUMMARY

Program manager, data scientist, and full-stack product architect with 12+ years of experience delivering enterprise data systems, machine learning, business intelligence, and automation solutions for federal and defense clients. PMI Agile Certified Practitioner (PMI-ACP) with an active Secret security clearance. Lead cross-functional teams of data scientists, engineers, and BI analysts using Scrum, serve as the primary point of contact for Government stakeholders, and turn complex technical work into decision-ready insight for executives. Work for the Defense Health Agency, the DoD Office of Inspector General, and FEMA includes predictive modeling, NLP, graph analytics, public-facing Tableau dashboards, and AI-enabled software products built end to end.

EXPERIENCE

Senior Associate | Knowesis

Oct 2025 – Present

Defense Health Agency, Health Readiness Policy and Oversight (HRP&O) · Falls Church, VA

- Serve as Program Manager, data scientist, and product architect, managing a 16-person team on the Health Readiness Policy and Oversight (HRP&O) contract.
- Act as the primary point of contact for Government stakeholders and Contracting Officer's Representatives (CORs) across the Military Health System, maintaining availability during core business hours and 4-hour response times for technical issue resolution.
- As Scrum Master, use JIRA and Confluence to manage product backlogs exceeding 200 user stories, facilitate sprint planning and retrospectives, and maintain Requirements Traceability Matrices that align deliverables with contract requirements.
- Mentor staff on Python, data validation, and ML pipeline architecture.
- Lead the Medical Logistics (MEDLOG) pharmaceutical supply chain illumination initiative: designed a dual-track, ML-augmented evaluation framework across five LLM-enabled supply chain platforms, scored pharmaceutical data quality and coverage, and authored the executive recommendation to the Assistant Secretary of Defense for Health Affairs (ASD(HA)) for a dual-pilot funded under Other Transaction Authority (OTA).
- Designed and built the Pharmaceutical Supply Chain Risk Management (P-SCRM) evaluation toolkit and methodology, a repeatable approach that scores risk management tools, products, and suppliers against weighted criteria including sourcing concentration, foreign dependency, sole-source exposure, and sustainment risk.
- Defined the data model, scoring rubric, and interactive BI dashboards that give DHA leadership a prioritized view of at-risk medical materiel.
- Developed a pharmaceutical market-share classification model across approximately 34,800 drug records with therapeutic-category roll-up and automated data-quality validation.
- Author weekly MEDLOG situation reports that condense operational inputs into executive-ready summaries.
- Built a Python analytic pipeline that replaced a manual monthly burn-reporting process, producing 15 individual employee status reports, labor-hour variance workbooks, and PTO-adjusted run-out projections with automated anomaly flagging. It triggers a Limitation of Funds escalation when projected contractual run-out falls within 60 days and recovers approximately 20 hours per month.
- Beyond the HRP&O contract, lead capture planning and competitive proposal development across the defense and federal analytics market using Shipley methodology, including analysis of RFP Sections L, M, C, and H; Pink, Red, and Gold color-team reviews; compliance matrices; capability statements; past performance

volumes; and pricing strategies for DoD and civilian agency pursuits. Built Scout (below) to automate this competitive analysis.
- Partner with executive leadership to identify growth opportunities and develop proposals using Agile estimation techniques.

Project highlight: Scout Competitive Intelligence Platform

- Designed and built Scout, a full-stack, multi-tenant federal solicitation monitoring and competitive intelligence SaaS platform (Python/FastAPI, PostgreSQL with pgvector, Docker, Cloudflare Zero Trust).
- Fused commercial, federal, and open-source feeds, including SAM.gov, USASpending, FPDS, and SBA, aggregating more than 50,000 records with four-level deduplication, AI-powered composite scoring, and automated validation.
- Built a four-phase multi-agent analysis pipeline with role-specialized models that produces Shipley-methodology competitive intelligence reports in about 6 minutes, compared with more than 8 hours manually. Reports cover bid/no-bid analysis with a six-posture recommendation, P(Win) scoring, black hat review, capture plans, and compliance matrices traced to RFP Sections L and M, delivered as DOCX and PDF.
- Built the agent workforce behind it: an orchestrator that routes each analysis task to four specialist agents (competitive intelligence, technical strategy, proposal architecture, and pricing and risk), and a 10-agent build crew that develops the platform under a QA release gate.
- Built a self-updating company profile: agents monitor SAM.gov, USASpending, FPDS, and GSA, detect new contract awards by UEI or CAGE code, and stage profile updates in a review queue that an admin approves before anything changes.
- Built "Ask Scout," a retrieval-augmented generation (RAG) copilot with intent classification, hybrid retrieval (full-text search plus vector embeddings), and streaming synthesis that cut multi-source research time from roughly 2 hours to under 2 minutes.
- Integrated the Claude API, a GovTribe MCP server, and n8n workflows, with an evaluation framework for agent output.
- Delivered the platform's operational and security layers: 23 automated scheduled jobs, an 8-stage procurement lifecycle tracker, a multi-format (PDF/DOCX/XLSX) document parsing pipeline, a daily morning briefing system, Content Studio for AI-generated audio briefings, slide decks, and charts using Google Gemini, row-level security, role-based access control with Google, Microsoft, and email authentication, and three mobile-responsive UI themes.
- Architected 30+ AI agent products as cross-platform LLM skills, MCP servers, and plugins installable with zero runtime dependencies across Claude Code, Gemini CLI, and ChatGPT CLI.

Enterprise Business Innovation Manager | Department of Defense

Aug 2024 – Sep 2025

Department of Defense Office of Inspector General · Raleigh, NC

- Led agency-wide, data-driven transformation initiatives as both technical lead and Scrum Master, integrating emerging technologies, AI solutions, and Agile methodologies across the DoD OIG.
- Aligned analytics strategy with organizational priorities, secured executive buy-in from senior leadership, and worked with program offices to define requirements, prioritize use cases, and drive adoption of enterprise analytics.
- Facilitated daily standups, sprint planning sessions, and retrospectives for a 12-person cross-functional team, using JIRA to track user stories and maintain a Requirements Traceability Matrix linking technical requirements to mission outcomes.
- Designed and implemented AI-powered allocation models that optimized personnel alignment with mission priorities, reducing time-to-hire by 10% and improving mission readiness.
- Cut manual analysis time by 60% through automation, Agile process redesign, and velocity-based planning, while increasing data accuracy and reporting consistency.
- Moved teams from manual reporting to self-service analytics workflows through change management and user adoption strategies.
- Established an Agile transformation roadmap that embedded continuous integration, sprint-based delivery, and measurable performance improvement throughout the enterprise.

Project highlight: AI-Powered Workforce Allocation System

- Led the architecture and deployment of an enterprise AI platform that transformed talent management through predictive analytics and intelligent automation, delivered across 24 two-week Agile sprints.
- Using Python, SQL, Tableau, TensorFlow, and BERT-based NLP models, implemented LSTM neural networks for workforce forecasting, XGBoost for attrition risk scoring, and genetic algorithms for constrained resource-allocation optimization.
- Maintained a Requirements Traceability Matrix covering more than 150 functional and technical requirements and facilitated sprint reviews with executive stakeholders.
- Achieved 95% on-time sprint delivery through disciplined backlog refinement, Level of Effort (LOE) estimation using planning poker, and continuous stakeholder feedback.
- Reduced hiring costs, improved workforce forecasting accuracy by 30%, and set a new organizational standard for iterative, data-driven workforce management.

Program Manager / Technical Lead | Knowesis

Sep 2019 – Aug 2024

Department of Defense Inspector General, Data Visualization Support Services · Alexandria, VA

- Managed data analytics support for multiple components within the DoD IG, directing a cross-functional team of more than 15 data scientists, engineers, and BI analysts delivering enterprise analytics and platform modernization.
- Organized, directed, and coordinated the planning and production of contract deliverables, achieving 98% on-time delivery; received the Glenn/Roth Award for Exemplary Service.
- Planned, designed, and developed Tableau dashboards using the Cycle of Visual Analytics approach to ensure quality design and rapid delivery, and supported ETL from sources including R, SAS, SQL, Python, and Excel.
- Led the end-to-end design and development of UkraineOversight.gov, a set of public-facing interactive Tableau dashboards providing oversight of federal Ukraine-related funding that was recognized by CNN, C-SPAN, and Congress.
- Directed the team's delivery of Human Capital Management's Enterprise Workforce Planning tool.
- Directed the team's delivery of the Defense Criminal Investigative Service's Affiliations Analysis and Fraud Trend Analysis, built on a Neo4j graph database with Cypher queries and applying centrality measures, community detection, and shortest-path analysis to map entity networks and surface fraud indicators for investigators.
- Directed the team's delivery of Supply Chain Analysis, visualizing monetary losses and the status of various threats.
- Spearheaded migration to a modern data stack (Cloudera, Hadoop, Spark), improving scalability and cost efficiency by 35%.
- Built a self-service analytics platform serving more than 400 business users.
- Founded a Data Science Center of Excellence to standardize modeling methodology, data governance, and analyst mentorship.
- Produced interactive trainings and webinars demonstrating BI dashboards to stakeholders and end users.

Project Manager / System Architect | Knowesis

Sep 2018 – Aug 2019

FEMA, Automated Debris Management System Development · Washington, DC

- Designed, architected, and delivered a scalable, full-featured disaster recovery management system to address the operational challenges of disaster recovery projects.
- Collected field data through a mobile application interoperable across iOS and Android devices, stored it in a centralized AWS cloud database, and provided real-time reporting through web-based Power BI dashboards.
- Interviewed SMEs to gather and scope requirements and delivered the platform across 6 rapid-iteration sprints, maintaining a Requirements Traceability Matrix linking more than 50 user stories to FEMA requirements.
- Used near real-time GIS data through web service APIs to automate navigation, distance calculations, location assignment, and interactive mapping.
- Served as the primary technical contact during active disaster events under 4-hour response SLAs.

- The platform set a new benchmark in the industry, led to partnerships with multiple engineering firms, increased the efficiency and accuracy of data collection, and automated many formerly manual processes, producing significant cost savings.

Technical Lead / Data Optimization Analyst | Knowesis — Feb 2018 – Sep 2018

Defense Health Agency, Health Readiness Policy and Oversight (HRP&O) · Falls Church, VA

- Led the analysis, design, technical development, testing, and user training of an enterprise records management system (RMS) for DHA.
- Coordinated the planning and production of complex technical functions, including metadata generation, automated content classification, and taxonomy management.
- Implemented intelligent, metadata-enabled solutions to improve search, management, identification and protection of sensitive data, content optimization, migration, text mining, and eDiscovery.
- Designed and developed BI dashboards for compliance monitoring and reporting of system and project metrics, reduced manual workload by 45%, and achieved 94% on-time delivery.

Data Manager | Atkins — Sep 2013 – Feb 2018

FEMA, STARR, STARR II, SC-EMD · Charlotte, NC

- Provided technical expertise across numerous multi-million-dollar FEMA projects.
- Designed and developed a data management solution for disaster mitigation efforts in South Carolina, with automated multi-stage data validation and analytics frameworks, that achieved an error rate of less than 0.05%.
- The solution earned Atkins a lead role with SC-EMD.
- Coordinated FEMA funding efforts for SC-EMD based on data from 22 counties totaling more than $300 million.
- Managed a team of analysts who translated technical data into meaningful reports, and presented this information to state officials and FEMA auditors as team lead.
- Delivered geospatial analytics for FEMA Risk MAP.
- Led the team that streamlined data sampling techniques, resulting in timely project completion and considerable cost reduction.

IT Business Systems Associate | Jacobsen, a Textron Company — Dec 2015 – Sep 2016

Charlotte, NC

- Served as the lead IT analyst for the finance, supply chain, and accounting departments.
- Led Oracle E-Business Suite (EBS) integrations for recently acquired organizations and managed development of an e-commerce platform.
- Pioneered business intelligence adoption using QlikView, giving departments real-time analytics, streamlined reporting, and better-informed decisions.

EDUCATION

Bachelor of Science in Management Information Systems: Business Intelligence & Analytics — 2015

The University of North Carolina at Charlotte

Affiliation: Association of Information Systems (AIS), UNC Charlotte, 2015

CERTIFICATIONS AND TRAINING

PMI Agile Certified Practitioner (PMI-ACP), Project Management Institute — 2022

DataWalk Technical Professional, DataWalk — 2022

Data Science Professional Certificate, HarvardX — 2021

Tableau Certified Associate, Tableau — 2019

SELECTED WORK

- UkraineOversight.gov: public-facing interactive Tableau dashboards providing oversight of federal Ukraine-related funding, developed for the DoD Office of Inspector General and recognized by CNN, C-SPAN, and Congress.
- Interactive trainings and webinars demonstrating business intelligence dashboards to DoD Inspector General stakeholders and end users.
- Marketing and training videos demonstrating records management system capabilities for the Defense Health Agency.

TECHNICAL SKILLS

Languages & Frameworks: Python, SQL, R, TypeScript, JavaScript, VBA, VB.NET, FastAPI, React, Next.js, Node.js, HTML

AI & Machine Learning: Predictive modeling, risk scoring, anomaly detection, classification, forecasting (LSTM), attrition modeling (XGBoost), NLP (BERT), optimization (genetic algorithms), LLM pipelines (RAG, multi-agent analysis), agent orchestration, evaluation frameworks, Claude API, Gemini API, MCP servers, TensorFlow, scikit-learn, pandas

Data & Platforms: PostgreSQL/pgvector, SQL Server (SSMS), Neo4j (Cypher), MongoDB, Redis, Hadoop, Hive, Spark, Cloudera, Databricks, SQLAlchemy, Alembic, Drizzle ORM

Cloud & Infrastructure: Amazon Web Services (S3, Lambda), Microsoft Azure, GCP, Docker, Kubernetes, Cloudflare (Tunnel, Zero Trust, Workers, R2), Vercel, VMware

BI & Visualization: Tableau (Cloud + Desktop), Power BI, QlikView, ArcGIS, matplotlib, Plotly

Enterprise Systems: Oracle EBS (11i, R12), SAP ERP (Finance modules), Concept Searching, DataWalk, SharePoint, Advana/War Data Platform

Web & Mobile: HTMX, Alpine.js, Tailwind CSS, Jinja2, shadcn/ui, GoCanvas, FastField

DevOps & Testing: Git, GitHub Actions, CI/CD pipelines, pytest, Vitest, Ruff, mypy, Semgrep, n8n workflow automation

Agile & Project Management: Scrum, JIRA, Confluence, Requirements Traceability Matrices, Microsoft Project, Visio, Visual Studio, Microsoft Office

Federal Domain: FAR/DFARS, FedRAMP, CMMC, SAM.gov, USASpending, FPDS, Shipley methodology, color-team reviews, compliance matrices, NAICS/PSC

Hardware & Media: Networking and subnetting, computer architecture, Adobe Photoshop, Premiere Pro, Figma, Canva