Karthick Govindaraju

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Data & Analytics Leader | Business Intelligence | Generative AI

PROFESSIONAL SUMMARY

Data and analytics leader with 15 years of experience building BI, data engineering, and analytics organizations, now applying generative AI to how businesses consume data. Manage a team of 6 BI engineers at Amazon Ads delivering revenue reporting for global Sales and Finance; launched a $2MM Tableau platform serving 5,000+ users, cut ETL compute costs by $600K/yr, and led an agentic AI analytics platform on Amazon Bedrock AgentCore that saves 500+ hours per week across 50 finance and analytics users. Outside work, builds AI-enabled personal projects (a full-stack web app with an MCP assistant integration and an agentic home-automation platform), keeping hands-on with modern AI tooling. Seeking a Senior Manager / Head of Data & Analytics role leading teams that turn data and AI into business outcomes.

CORE SKILLS

Leadership: Team management & hiring, data strategy & roadmap, stakeholder management, executive communication, vendor & contract negotiation, Agile delivery

Data & BI: Data warehousing, dimensional modeling, data marts, ETL/ELT, data governance & quality, KPI design, self-service analytics, revenue & finance reporting

AI / GenAI: Amazon Bedrock AgentCore, Bedrock Knowledge Bases, Anthropic Claude, agentic AI, LLM applications, prompt engineering, AI agents, MCP, Whisper, human-in-the-loop AI

Platforms: AWS (Redshift, EMR, Glue, Athena, Lambda, EC2, ECS Fargate, S3), Apache Airflow, PySpark, PostgreSQL, Docker

Visualization: Tableau (Server admin), Amazon QuickSight, Power BI, D3.js, Matplotlib

Languages & Methods: SQL, Python (Pandas, scikit-learn), JavaScript; statistics, A/B testing, forecasting, Lean Six Sigma

PROFESSIONAL EXPERIENCE

Manager, Business Intelligence, Ads Sales (Twitch Ads, Agency, ADSP, Partner Dev) **08/2021 - Present**

Amazon Ads, Seattle, WA

- Lead a team of 6 BI engineers owning revenue reporting, data pipelines, and data marts for Twitch Ads, Agency, and Ad-Tech segments, serving global Ads Sales, Finance, and Compensation teams across multiple countries; own hiring, mentoring, roadmap, and prioritization.
- Led product direction for an agentic generative AI analytics platform on Amazon Bedrock AgentCore: users ask questions or assign tasks in a web app, and agents run in isolated AgentCore Runtime sessions to pull data, compute and reconcile metrics, and deliver results as CSV, PDF, or interactive HTML dashboards. Governed data access with IAM role-based permissions and extended the agent with custom skills and knowledge bases as tools. Saves each of 50 finance and analytics users 10+ hours per week (500+ hours weekly) on report generation and data reconciliation.
- Shipped an earlier Bedrock + Anthropic Claude 3 analytics chatbot that answers revenue and performance questions in natural language, so leaders get answers without writing SQL or browsing multiple dashboards.
- Led the $2MM Tableau Server platform launch for the Ads Finance org: a 4-node cluster on AWS EC2 in a corporate VPC with SAML SSO and Active Directory permissions; scaled to 200+ dashboards serving 5,000+ users across Ads Sales and Finance.
- Re-architected legacy Redshift SQL ETL to PySpark on AWS EMR, cutting job runtime 50% and saving $50K per month ($600K/yr) in compute cost.
- Defined requirements and KPIs with business, product, and finance leaders and launched 10 self-service dashboards that 1,000+ users now run their sales decisions on.
- Led a critical data migration of Advertiser/Agency mappings across 50K advertisers and 1,000+ partners, covering data reconciliation, gap analysis, and revenue-impact assessment; drove the product fixes that closed every gap with zero reporting disruption.

- Owned vendor selection, contract negotiation, technical requirements, and integration for third-party ad-market insights data, enabling Sales to measure market share and set data-driven sales targets.

Data Engineering Lead **01/2016 - 08/2021**

Gulfstream Aerospace, Savannah, GA

- Led end-to-end data infrastructure for the Engineering organization, including an Amazon Redshift data warehouse, dimensional data models (star/snowflake), Python/SQL ETL pipelines, and customer-facing Power BI dashboards.
- Delivered business-process automation projects used by 1,000+ engineers, saving $5M+ annually.
- Built a web-based recommendation engine (Python Flask; market-basket analysis + Levenshtein text similarity) over 1M nonconformance records that surfaced historical fixes for current engineering issues, saving engineers 2+ hours/day and cutting solution lead time 80%+.
- Developed a full-text search engine indexing 1,000+ legacy documents and aircraft specifications, improving engineer efficiency 20%+.
- Built forecasting and ROI metric dashboards and presented findings and recommendations to senior leadership to guide business strategy.

Technical Program Manager / Operations Engineer **06/2011 - 12/2015**

Gulfstream Aerospace, Savannah, GA

- Secured $1M in savings through Lean Six Sigma process-improvement initiatives, using hypothesis testing and design of experiments (Minitab) for root-cause elimination.
- Drove the ERP implementation, translating business requirements into technical specifications and aligning IT and business teams on delivery.

PERSONAL AI PROJECTS

CleanStay: Property-Operations Web App with AI Assistant Integration **2025 - Present**

Personal project | github.com/kgcodes1288/KASA

- Designed and built a full-stack property-operations web app for short-term-rental hosts, with Airbnb iCal sync that auto-generates cleaning jobs, room-by-room checklists, recurring maintenance, a vendor quote and owner approval flow that auto-drafts invoices, and role-based owner, co-host, and contractor dashboards.
- Built an MCP (Model Context Protocol) server with OAuth 2.0 authorization so users can connect AI assistants such as Claude to their account and manage listings and jobs in natural language.
- Built the full stack: React 18 + Vite, Node.js/Express REST API, PostgreSQL + Prisma, JWT and Google OAuth 2.0, Twilio SMS, Resend email, Cloudinary; Dockerized behind Caddy with isolated staging and production environments and one-command deploys.

Home Lab: Self-Hosted AI Automation Platform **2025 - Present**

Personal project

- Drive day-to-day automation with agentic AI (Claude Code + MCP servers for email, Google Workspace, and custom APIs); e.g., migrated ~50K photos/videos (404 GB), removed 12,158 duplicates, and auto-built albums from date + GPS clustering (+3,522 assets) with full undo logs.
- Architected and run a home-lab platform running 30+ containerized services (Docker Compose; Supabase/Postgres, Nextcloud, Immich ML, Jellyfin, multiple web apps) with Cloudflare Tunnel + Zero Trust Access, nightly encrypted restic backups to Backblaze B2, UPS-triggered graceful shutdown, systemd timers, and push alerting.
- Built a personal-finance data pipeline (Google Sheets to Python ETL to a static dashboard) with reconciliation assertions that tie to the cent every month.

EDUCATION & CERTIFICATIONS

M.S., Computational Data Analytics, Georgia Institute of Technology 2021
M.S., Industrial Engineering, University at Buffalo, SUNY 2011
B.E., Electronics & Instrumentation, Madras Institute of Technology, India 2009

Certified Six Sigma Black Belt (CSSBB), University at Buffalo | MicroMasters in Analytics, Georgia Tech