

Geoff Fane

Data & AI Specialist · Trusted Local AI · Data Architecture

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EXECUTIVE PROFILE

Senior Data & AI specialist with 25+ years of experience across federal government, public-sector analytics, data architecture, business intelligence, CRM, software development, solution architecture and enterprise delivery. My base is practical delivery: I have worked as a developer, technical lead, delivery manager, solution architect, data architect and BI specialist across Microsoft Consulting Services, Telstra Business & Government, federal agencies, public-sector programmes and private-sector clients.

My current focus is trusted local AI: RAG, private knowledge systems, document intelligence, workflow assistants and AI adoption that respects privacy, governance, organisational context and human judgement. I am interested in AI that is useful, understandable, friendly to the people using it and careful about ownership of data and context.

I combine deep data and architecture experience with current hands-on AI and full-stack delivery skills across Linux Ubuntu, Python, FastAPI, PostgreSQL, JavaScript, Node.js, Docker, Astro, Keystatic WebCMS, GitHub, Cloudflare Pages, LangChain, LangGraph, vector search and prompt/workflow design. I use AI-assisted coding carefully, including vibe coding, but grounded in requirements, architecture, data models, acceptance criteria, testing, review and handover.

CURRENT CONSULTING FOCUS

- **Trusted local AI** — Design and deliver practical AI, RAG, document intelligence and workflow assistants that are useful, privacy-aware, explainable enough to hand over, and grounded in the organisation's own data and operating context.
- **Data, BI and governance** — Bring 25+ years of data warehouse, Power BI, metadata, dimensional modelling, stewardship, privacy and public-sector reporting experience into AI projects that need trusted information foundations.
- **Architecture-led AI-assisted development** — Use AI-assisted coding, including vibe coding, as a disciplined delivery technique. Requirements, specifications, architecture notes, data models, acceptance criteria, review and testing guide the build.
- **Full-stack developer** — Build working prototypes and services using Linux Ubuntu, Python, FastAPI, PostgreSQL, JavaScript, Node.js, Docker, Astro, Keystatic WebCMS, GitHub, Cloudflare Pages and modern API patterns.
- **Advisory, planning and enablement** — Work with executives, architects, developers, analysts, community teams and service operators to shape scope, run workshops, explain options, present clearly, and leave people able to keep improving the system.

CORE CAPABILITY SNAPSHOT

- **Trusted AI & knowledge systems** — RAG, private knowledge assistants, document intelligence, workflow agents, prompt frameworks, local model orchestration, vector stores, memory and identity files, LLM evaluation and safe handover patterns.
- **AI-assisted software delivery** — Specification-led vibe coding, user stories, acceptance criteria, architecture decision notes, data models, review loops, test thinking, Git-based workflow and maintainable prototype delivery.
- **Full-stack & web delivery** — Linux Ubuntu, Python, FastAPI, PostgreSQL, JavaScript, Node.js, REST APIs, HTML/CSS, JSON, Docker, Astro, Markdown/MDX, Keystatic WebCMS, GitHub and Cloudflare Pages.
- **Data architecture & governance** — Conceptual, logical, physical, dimensional and semantic modelling, metadata, catalogues, lineage, data stewardship, privacy impact, Kimball bus matrix and enterprise data blueprints.
- **BI, analytics & data engineering** — Power BI, DAX, Power Query, SQL Server, SSRS, Azure Data Factory, SSIS, SSAS, Qlik, Oracle reporting, data marts, dashboards and executive reporting.
- **Architecture & delivery leadership** — Enterprise, solution, data and software architecture, Agile Scrum, SAFe, PRINCE2, SDLC, DevOps, stakeholder workshops, business cases, technical governance, capability uplift and documentation.

SELECTED AI, SOFTWARE & PORTFOLIO WORK

- Took a planned career reset from June 2025 to focus full-time on AI development, trusted local AI workflows, modern full-stack web delivery, estate responsibilities for my late father, travel and relocation to Brisbane.
- Built and maintained **froodx.net** as a public personal lab for AI writing, initiatives, prototypes, knowledge visualisation, full-stack experiments and selected portfolio work.
- Developed **Trusted Local AI** concepts focused on practical AI companions and assistants that keep memory, identity, context and working knowledge close to the user or organisation.
- Developed **Metacore**, a FastAPI and PostgreSQL application framework with structured APIs, authentication patterns, migrations, exportable outputs and volunteer coordination concepts.
- Built and refined content-driven web systems using Astro, Markdown/MDX, Keystatic WebCMS, GitHub and Cloudflare Pages, including local editing, live deployment and structured content workflows.
- Practised specification-led AI-assisted development, where planning documents, user stories, architecture notes, data models and acceptance criteria guide AI coding tools rather than relying on loose prompting.
- Continued practical research and writing on AI ethics, local context, privacy, prompt quality, AI literacy, human values and the risk of deploying AI without clear ownership, governance and handover.

CAREER PATH

Data & AI Specialist	Independent	Jun 2025 – Present
DW/BI Developer	Department of Health & Aged Care	Jul 2023 – Nov 2024
DW/BI Developer	Department of Agriculture, Fisheries and Forestry	Sep 2022 – Mar 2023
Solution Architect	Suburban Loop Rail Authority	Feb 2021 – Aug 2022
DW/BI Developer	Department of Agriculture, Water and the Environment	Jan 2020 – Jan 2021
Data Architect & Engineer	Department of Education and Training	2019 – 2020
Data Architect	Department of Environment and Energy	2016 – 2019
Enterprise Data Architect	Department of Industry, Innovation & Science	2010 – 2016
Solution Architect	Microsoft Consulting Services	2007 – 2010
Delivery Manager / Architect	Telstra Business & Government	2002 – 2007
BI / DW & CRM Developer, Analyst Programmer / BA	Sydney	Pre-2002

TECHNICAL SKILLS

- **AI & agentic systems** — Jupyter, Polyglot Notebooks, LangGraph, LangChain, agentic workflow patterns, RAG, vector embedded databases, prompt engineering, local AI orchestration, LLM evaluation and practical model use.
- **Specification-led vibe coding** — Planning documents, requirements, user stories, acceptance criteria, architecture notes, data models, review loops and working prototypes built with AI coding tools under human design control.
- **Software & web development** — Python, FastAPI, JavaScript, Node.js, HTML/CSS, JSON, REST APIs, PowerShell, XML/XSLT, Git, GitHub, ASP.NET, EF Core, C#, C++, VB6, VBA, Pascal and LISP.
- **Linux, containers & platform delivery** — Linux Ubuntu, Docker, containerisation, local development environments, Cloudflare Pages, GitHub-based deployment, Azure services and platform handover.
- **Content & WebCMS systems** — Astro, Markdown/MDX, Keystatic WebCMS, structured content models, public portfolio sites, local and live editing flows, and content-led knowledge publishing.
- **Business intelligence** — Microsoft Power BI, DAX, Power Query, SQL Server Reporting Services, Qlik, Oracle Reports, ProClarity, Crystal Reports, BRIO Reports and executive dashboards.
- **Data engineering** — Azure Data Factory, SQL Server Integration Services, SQL CLR, SSAS OLAP, MDX, Azure Synapse Analytics, Azure Data Lake Storage and data integration design.
- **Database platforms** — SQL Server 7 through 2022, Azure SQL Database and DW, PostgreSQL, Databricks, Oracle 8i through 21c and Azure SQL Managed Instance.
- **Data & systems modelling** — Conceptual, logical, relational, dimensional and semantic modelling using Sparx EA, ER/Studio, ERwin Data Modeller, Visual Paradigm and Orbus iServer365.
- **Dynamics, CRM & enterprise systems** — Dynamics CRM and Dynamics 365, Dataverse-aligned data concepts, SharePoint, CRM interfaces, call centre integration and enterprise solution design.
- **Delivery methods & tools** — Agile Scrum, SAFe Agile, PRINCE2, P3M3, MSF Agile, capability modelling, BPML, Azure DevOps, VSTS, TFS, Git, PowerShell and MS Build.

PROFESSIONAL EXPERIENCE

DW/BI Developer — Department of Health & Aged Care

Jul 2023 – Jun 2025

- Developed Power BI templates, Power Query dataflows, dimensional models, DAX measures and portfolio reporting for ICT divisions adopting SAFe Agile and Azure DevOps delivery practices.
- Supported the Aged Care Data Warehouse and Risk Based Targeting Information System, including data engineering, database support and reporting for aged care regulatory reform.
- Supported the operationalisation of a statistical risk model originally developed in Python, then reworked into SSIS packages to improve performance and reliability for risk-based scoring of aged care providers and service delivery.
- Supported architecture and impact assessment work for New Aged Care Act reforms, including implications for data assets, governance, funding transitions and regulatory reporting.
- Designed metadata management improvements at the database and semantic model layer, including business-described metadata, constraints, lineage and a dynamically generated Kimball bus matrix.

DW/BI Developer — Department of Agriculture, Fisheries and Forestry

Sep 2022 – Mar 2023

- Designed and delivered Power BI dashboard reporting for the Cargo Service Delivery Taskforce.
- Analysed, designed and developed an Australian seaport dimensional data model.
- Facilitated executive stakeholder meetings, requirements workshops and design presentations.
- Delivered data engineering across SQL, Azure Data Factory, Power BI Power Query and DAX.
- Prepared high-level solution design and business case material for project, industry and capital bid funding.

Solution Architect — Suburban Loop Rail Authority

Feb 2021 – Aug 2022

- Delivered Power BI development, data modelling, administration, analysis and reporting for a major public infrastructure agency.
- Designed the Data and Analytics Integration Platform to ingest, store, analyse, transform, model and surface data insights.
- Architected Azure Data Lake, Data Factory and SQL Managed Instance platform patterns for the SRLA data and analytics capability.
- Contributed to the Digital and Data Strategy and Roadmap, including capability development, recruitment and data governance planning.
- Established the Enterprise Architecture Review Group, terms of reference, templates and EA repository.
- Defined data and information artefacts across the EA blueprint, including data asset catalogue, business glossary, conceptual, logical, physical and dimensional models.
- Developed data governance RACI, data asset prioritisation, valuation analysis and EDW bus matrix design.

DW/BI Developer — Department of Agriculture, Water and the Environment

Jan 2020 – Jan 2021

- ML and data engineering using Jupyter, Python and Azure Data Factory ETL — Data Lake to Data Mart delivery.
- Delivered Power BI dimensional models, ETL, dashboards and visualisations for business reporting needs.
- Performed Agile requirements elicitation, documentation, dimensional modelling, design and development.
- Designed data warehouse ETL and data movement patterns, including lineage and data landscape views.
- Built conceptual, logical, physical, relational and dimensional data models using Kimball methods.

Data Architect & Engineer — Department of Education and Training

2019 – 2020

- Delivered a departmental data steward's manual aligned to government data governance practice.
- Delivered a Privacy Impact Assessment for the TCSI data integration project.
- Analysed and modelled multiple data warehouse and data mart environments across schools, higher education, vocational education and early childhood portfolios.
- Reviewed and critiqued service design and architecture for a bespoke data virtualisation platform using C#, .NET Core, Entity Framework and Microsoft Azure Service Fabric.
- Developed Power BI models, reports and dashboards for education portfolio analysis.

Data Architect — Department of Environment and Energy, Federal Government

2016 – 2019

- Established a Data Management Group and contributed to the department's information and data management strategy.
- Delivered an enterprise information and data blueprint, including current and future-state conceptual data models and data landscape views.
- Established architecture governance structures, including an Architecture Reference Board and project Technical Design Authority.
- Oversaw data and information governance and capability development requirements.
- Aligned data architecture with business process needs in a dynamic, milestone-focused delivery environment.

Enterprise Data Architect — Department of Industry, Innovation & Science, Federal Government

2010 – 2016

- Acted as a trusted adviser in a disruptive ICT environment moving towards bimodal service delivery, Agile, Lean and DevOps.
- Represented business, information, application and infrastructure domains across enterprise architecture and solution design work.
- Contributed to the formation of a new division and branch responsible for departmental data delivery and governance.
- Re-established an adaptive enterprise architecture capability with open, transparent collaboration across branches and architecture domains.
- Played a key role in establishing an Enterprise Architecture Reference Group for principles, high-level solution design review and strategic capability alignment.
- Planned and developed a department-wide SDLC repository and quality assurance process.
- Helped deliver Lighthouse, a central enterprise data warehouse and report portal using Australian Business Register data, supporting whole-of-government grants capability, improved data quality and business-led analysis.
- Contributed to multi-year Infrastructure Modernisation Programme delivery, reducing network footprint and complexity through Active Directory consolidation.

Solution Architect — Microsoft Consulting Services

2007 – 2010

- Provided solution architecture, development, release management, mentoring and delivery support for enterprise Microsoft data platform, SharePoint and Dynamics CRM solutions.
- Consulted with development and deployment teams on solution design, work packages, release planning, data/entity modelling and technical delivery risks.
- Supported major account bids and pre-sales presentations for public-sector and enterprise clients.
- Worked directly with the Dynamics product team in Redmond on early Dynamics solution features, now aligned with Dataverse concepts, including design, planning, testing and written review.
- Delivered or supported projects for Telstra Business and Government, DEEWR, Westpac, BT Funds Management, Fair Work Australia, Finance, DFAT, Rio Tinto and environment agencies.
- Maintained hands-on software development credibility across .NET, CRM customisation, entity modelling, integration and enterprise application delivery.

Delivery Manager / Architect — Telstra Business & Government

2002 – 2007

- Led a system development team of 14 staff and liaised with third-party developers to deliver, maintain and deploy multiple superannuation fund CRM systems.
- Managed solution design and architectural planning for Microsoft Business Solutions and .NET-based Dynamics CRM products.
- Developed an enterprise data warehouse and BI decision-support system that supported marketing campaign initiatives and competitive positioning.
- Managed CRM call centre interface design, CRM SharePoint integration and Active Directory roll-out across seven separately managed forests with multiple domains.
- Combined team leadership, delivery management, software design, data warehousing, stakeholder communication and technical problem-solving in demanding commercial environments.

Earlier Roles — Sydney

Pre-2002

- BI / DW Developer, Professional Advantage.
- CRM Developer, eCRM Solutions Pty Ltd.
- Analyst Programmer / Business Analyst, News Interactive, News Limited.
- Built the early software development, business analysis, database and web delivery foundations that later expanded into CRM, data warehousing, architecture and AI-enabled systems work.

QUALIFICATIONS & CERTIFICATIONS

- **Degree** — Bachelor of Information Technology, University of Canberra.
- **Data & architecture** — DAMA DMBOK, Kimball Dimensional Modelling, TOGAF 8.1.
- **Agile & delivery** — SAFe Agile, PRINCE2, plus project / portfolio capability methods including P3M3 and SDLC practice.
- **Microsoft** — MCSD, MCSE, MCDBA, Dynamics CRM Master, Dynamics 365 experience and Microsoft Consulting delivery background.
- **Business systems** — SalesLogix Enterprise, Attache Business Partner and Payroll, Data.Tech MYOB QCP Consultant and Intuit Accredited Trainer.

PROFESSIONAL STYLE

- Practical, calm and outcome-focused, with the ability to lead under pressure while maintaining discretion, confidentiality and judgement.
- Strong communicator who can translate between executives, architects, developers, data specialists, business users and community operators.
- Able to lead teams, run workshops, present technical options, facilitate requirements and support both senior stakeholders and hands-on delivery teams.
- Comfortable with ambiguity, but prefers to turn it into clear scope, working slices, documented decisions and systems that can be maintained by real people.
- Motivated by useful technology, public value, community benefit and AI that helps people think, work, learn and care better without losing ownership of their own context.