TIMOTHY K. REYNOLDS
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EXECUTIVE PROFILE

Senior technology strategist with **42+ years** of experience enabling **enterprise-scale transformation** through advanced and emerging technologies. Proven record of converting innovation into **core competencies, durable competitive advantage, measurable profitability, and long-term enterprise value**.

Recognized for pioneering **AI expert systems**, **geospatial intelligence**, and **mission-critical enterprise platforms** across utilities, manufacturing, finance, and government—often ahead of industry adoption curves. Known for translating complex technology into operational reality by aligning systems with business objectives, risk management, and future-state strategy.

STRATEGIC VALUE PROPOSITION

- Converts emerging technologies into **operational advantage**
- Builds **enterprise platforms**, not one-off solutions
- Aligns technology investments with **ROI, resilience, and longevity**
- Excels in **high-risk, mission-critical environments**
- Bridges executive vision and technical execution

"Vision creates momentum; action makes it real."

ENTERPRISE IMPACT SUMMARY

Artificial Intelligence (Early & Modern)

- Knowledge Engineer within EDS Artificial Intelligence Services supporting **General Motors** during the emergence of AI expert systems.
- Delivered production AI systems that reduced operational risk, improved decision quality, and prevented high-cost failures.
- Deep experience translating **subject-matter expertise into knowledge systems**—a capability increasingly critical to modern AI adoption.

Geospatial Intelligence & Infrastructure Transformation

- Architect and primary driver of Avista Utilities' transformation from paper-based operations to a **fully spatially enabled enterprise**.
- Created Avista's first production GIS outage management and dispatch visualization system, fundamentally changing how outages, crews, and assets were managed.
- Led development of a comprehensive **enterprise geospatial platform** that became one of Avista's most leveraged and durable core competencies.

Mobile & Field Operations Enablement

- Designed and implemented **Mapbooks**, a mobile GIS platform supporting ~500 field crews operating 24/7/365.
- Enabled online/offline field operations, automated synchronization, real-time dispatch, job routing, and

asset updates.

- Remains one of Avista's most heavily utilized and operationally critical systems.

Enterprise Systems Architecture

- Designed and implemented object-oriented enterprise Work Management systems still delivering value nearly two decades later.
- Developed extensible component models enabling long-term reuse across multiple enterprise platforms.
- Integrated GIS, Work Management, Outage Management, and Service Suite systems into a unified operational ecosystem.

RECOGNITION & VALIDATION

- **ESRI Special Achievement in GIS (SAG)**
  Awarded at ESRI's international conference from a field of over **100,000 organizations** for innovative and transformational use of GIS technology.
- Multiple enterprise and leadership recognitions for innovation, operational excellence, and risk reduction.
- Long-term trusted contributor to Avista Utilities across multiple decades and organizational transitions.

SELECT CLIENTS & ORGANIZATIONS

- General Motors (GM)
- GMAC Finance
- Caterpillar
- Avista Utilities (WA, ID, MT, OR)
- Electronic Data Systems (EDS)
- Douglas County, Colorado
- University of Utah – Center of Excellence for Micro Analysis and Reaction Chemistry
- Fujitsu (Senior Consultant supporting Avista Utilities)

CURRENT FOCUS

Senior Solution Architect – Reynolds Geospatial LLC (2024–Present)
Designing and implementing a **fail-safe, AI-enabled event security and communications platform** for armed security operations, featuring:

- No internet or LAN dependency
- Voice, data, and radio mesh networking
- AI-driven speech-to-text, classification, and automation
- Real-time geospatial situational awareness
- Dead-man detection and immediate alerting
- Secure, resilient, low-latency architecture

This platform reflects a convergence of decades of experience in **AI, distributed systems, geospatial intelligence, and mission-critical operations**.

CAREER HIGHLIGHTS

- Senior Solutions Consultant / Architect – Reynolds Geospatial LLC & Fujitsu
- Enterprise Systems Engineer – EDS (Avista Utilities)
- AI Knowledge Engineer – EDS Artificial Intelligence Services (GM)
- Technical Director – University of Utah (MARC)
- GIS Spatial Database Engine Administrator – Douglas County, CO

EDUCATION

B.S. Finance – University of Utah
Emphasis in Risk Management, Operations, Accounting, and Statistical Analysis

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BOARD-LEVEL TAKEAWAY

Tim Reynolds is not a technologist chasing trends.
He is a **builder of enduring enterprise capabilities**—someone who consistently transforms emerging technology into **operational reality, strategic leverage, and long-term value**.

He excels where:

- Failure is expensive
- Complexity is unavoidable
- Systems must last decades, not quarters
- Vision must translate into execution

REYNOLDS GEOSPATIAL LLC

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Senior Solutions Consultant

Executive Summary:

42+ years generating competitive advantage and core critical competencies for some of the world's largest, most successful, profitable and innovative enterprises; *enabling emerging technology solutions*.

- **General Motors** (GM) was the largest company in the world at that time when it gave birth to the most significant advancement of AI technologies, *Expert Systems*. ***EDS Artificial Intelligence Group Knowledge Engineers* shared a common directive with GM's *Advanced Engineering Staff* to bring emerging AI technologies into GM which we did as *Artificial Intelligence Expert Systems*.** We were certified Knowledge Engineers. A lot of what was relevant then with Knowledge Engineers and subject matter experts building knowledge databases is **even more relevant and valuable today**. **It's not the AI technical experts that will drive the most value for organizations but the ones working with your subject matter experts capturing their life long experiences, processes, and constraints into a database** and because 80% of all data has a spatial component its **much more intelligent to put it into a spatial geodatabase**.
- **GMAC Finance (GMAC)**
- **Caterpillar (CAT)**
- **NeoData (ND)**
- **Electronic Data Systems (EDS)**
- **Douglas County Colorado (GIS Administration)**
- **Avista Utilities (WA, ID, MT, OR)**
- **University of Utah's Center of Excellence for Micro Analysis and Reaction Chemistry (MARC)**

Keys to my success:
From Bernad Shaw, *"Those who say it cannot be done should not interrupt those who are doing it."*
And my own quote: "Vision creates momentum; action makes it real."

For decades Avista Utilities managed all their facility maintenance including outages on paper and some few more complex processes on spreadsheets. Because I had an understanding of SPACE as a new dimension of data enabled by geospatial mapping systems like ESRI. **I took the personal initiative to drive Avista forward supplying just enough momentum to make it REAL and ultimately generate outstanding core competencies with attendant ROI**. I made it real by creating the first ESRI spatially enabled Outage Mapping solution at Avista, the Regional Dispatch Manager.

One man with a true vision really can perform miracles like transforming management-by-paper into a spatial geodatabase geo-positioning all the pipes, wires, devices, crews, etc. enabling in real time and in parallel efficiencies maximizing and optimizing the majority of Avista's applications, communications, for their entire suite of products and services not to mention major reductions in risk, increase in safety, and "Holy Cow … Batman!" "Wham! BAM! POW***" just try to imagine the virtual geometric hockey stick of what AI can enable with this whole new added spatial dimension and quantity of data … inconceivable!

Because envisioning reality is what I do, I wrapped ESRI api calls in Smalltalk wrappers and placed all the damage report locations on a map after an ice storm took down about 80% of our electrical facilities.

It was the first time anyone at Avista had seen spatial facility data on a map. The dispatchers loved it and called

it the red dot machine. Red dot or not, it was my reality staring them in the face on a map. It created just enough momentum that Avista became one of the first major utilities to build a geospatial mapping application. I also had a vision for our first application and designed most of its required components and coded and implemented them as well. I called our fledgling GIS work a little monkey but over the years, as I believed it would, that monkey matured into a mighty 800 pound GRORLLA!

We were rewarded by ESRI at their international conference for our ESRI GIS facility conversion and Utility Industry solutions at Avista like our innovative Outage Management application. We received the coveted ESRI Special Achievement in GIS award "SAG" in competition with over 100,000 candidates.

I consider competing with 100,000 organizations and winning as a MAJOR validation of my Solution Architect and emerging technology innovation credentials, wouldn't you?

Do you employ personnel at your organization of this caliber? Maybe I could help. I do not know everything and my skills and abilities are limited. Nevertheless, I know how to adapt, skill up, leverage resources, and most of all I have the character, talent, and ability to generate the vision and make it REAL.

I didn't just wake up one day and have this talent. I got it the old fashioned way, I earned every penny of it every day, every night, and all the between-times while raising seven beautiful children. One is a vice president of *Bank of America* performing risk management with responsibilities for communicating with external entities including the federal government.

Another is a director of an online learning institution with 200 direct reports. Another works with young disabled children that are mostly speech impaired. She loves and challenges them. She believes in them and they respond and love her because she too has a vision for them and they are making it real.

Promises made; promises kept:
As a *Senior Solutions Consultant* with an impressive 42 year record of emerging technology solutions, I am confident I can enable your enterprise for success as well.

I help major enterprises turn emerging technologies into:

- competitive advantages
- core competencies
- measurable profits
- durable enterprise value

Let's make good things happen for you today!

Summary of emerging technology solutions at Avista (2006-2024)

Avista Utilities account in Spokane, WA serving WA, ID, MT, OR.
While working on the EDS Artificial Intelligence Services team in Troy, Michigan, Washington Water Power now Avista Utilities, I joined a few other Smaltalk trained knowledge Engineers to build an award wining Customer Information system and Work Management System with object-oriented analysis, object-oriented design and the Smalltalk language. We started with a clean slate and delivered state-of-the-art enterprise-level, core competency systems that have provided Avista a significant profitability improvement for 18 years and into the future. In contrast, note that many attempts at creating Work Management systems in those days failed to complete.

I took on the challenge to create a customized set of work units modeled after IBM's Compatible Units to include all the individual components and assemblies of components used by Avista gas and electric crews to build and maintain its entire infrastructure. This system of components allowed for changes, additions, and corrections (as designed and as built). It has given Avista a competitive advantage for 18 years not just for Work Management but leveraged across its suite of Enterprise Systems. It is included in their newest systems integrated in from General Electric. I, also, integrated it into our GIS systems including our mobile crew order processing system, another successful vision I made REAL.

Looking around for other opportunities to benefit Avista my focus turned to the advanced emerging technology of Geospatial. By definition it is truly transformational adding a whole new dimension to computing, SPACE.

This realization was truly inspiring … “The Final Frontier … going where no man has gone before ...” and what an adventure it has been. I would spend the next 18 years at Avista exploring this new spatial dimension; pioneering, enabling, and creating spatial solutions at Avista. As a pioneer I saw an opportunity when we had an Ice Storm with freezing rain taking down a majority of Avista's electric facility. I took some ESRI Geospatial libraries and wrapped them as Smalltalk functions to Geo-position out-of-power customers by address. Then I loaded these as features into a map symbolized as red dots. This allowed dispatchers to visualize where the outages were and engineers to visualize how to switch feeders to optimize bringing them online. It also lead to an understanding that better tree trimming needed to happen to reduce our exposure in the future. Before then this was all done manually on paper. I called it the *Regional Dispatch Manager* app.

The Outage Dispatch Managers called it the *RED-DOT-MACHINE*. Management really liked the usefulness of the red dot machine and it motivated them to follow through. There was a major hurtle for spatial solutions at Avista. In order to gain the advantage of being able to spatially enable your gas and electric facilities you need to physically collect the spatial location of each component of that facility. It didn't take them long to realize the high value and competitive advantage potential of spatial solutions. They committed to build this major spatial geodatabase asset with the promise of meeting their objectives of improved performance, increased (ROI), and future durability of asset equity returns.

That decision paid off mega-big for them over the years including Federal and State Smart City grants in the millions with Smart Meter technologies and meter reading relays, and on and on. The baby spatial monkey I took in hand and nursed to life has grown into the King Kong of competitive advantage, innovation, and profitability at Avista.

I didn't stop there. I saw an opportunity to take spatial solutions to the crews in the field when these types of solutions were rare to almost non-existent. For many years I was the sole architect, developer, and maintainer of the remote crew devices we call Mapbooks. I was able to put a spatial map with the ability to update map features on a fielded laptop. Then I designed and implemented data persistence via a SQL Server Express geodatabase to capture updated feature information. Next I created probably the first production web services at Avista to report facility updates back to centralized geodatabases. This also allowed crews to work online or disconnected when out of service coverage and to auto sync their offline changes upon reconnecting.

When we had enough functionality to justify putting this mobile functionality in the hands of our crews we gave them all laptops with it loaded. To keep the information current, I make programs to run on the network to update the crew mobile devices with current code and data at their remote offices. Since our crews number about 500 we have continued to the present day with supporting them with Mapbooks that have become ever more innovative, capable, and indispensable. I integrated a Service Suite crew jobs management system into Mapbooks where they now receive orders in real-time, spatially locate to them, process them per type of order with their own set of forms and return the updated jobs with spatial properties back to the centralized Service Suite system. I then added an efficient crew-to-next-job routing capability.

The Mapbooks allow jobs to be dispatched to a specific crew member and track the job process. Crews can also create jobs on site and send them back to Service Suite requesting the new job to be dispatched directly back to them so then can fully process the job immediately while on site.

With 500 crew members using Mapbooks 24/7/365 this is by far the most highly leveraged, innovative, and successful spatial platform in use at Avista today. One could argue that it is the most customer facing, efficiency enabling and competitive advantage spatial system at Avista today. Crew work is where this company meets the road; a core competency to be sure. The odd thing is we have three separate IT teams working on spatial applications at Avista now continually but as far as serving the largest internal customer base there has only been, for the most part, one team member supporting Mapbooks, me.

I started out at Avista as an EDS employee. I left EDS and Avista to explore SDE Administration for Douglas County for about a year. It turned out that particular county team was not well aligned with my career objectives. Avista had just started a major multi-system upgrade project and made me an offer to return that I could not refuse as an independent contractor.

I formed a company Reynolds Geospatial LLC and started contracting with Avista full time. After several years Avista decided to work only with certain larger contractors like Fujitsu. So, I went to work for Fujitsu as a Senior Solution Consultant sub contractor and have done so for several years now continuing to serve the Avista Account client.

Emerging Technology Solutions: Implementation

- GMAC Dealer Review Advisor AI Expert System
- GMAC Unix System Administration:
  Provided sole Unix System administration for three Sun Unix networks at GMAC Headquarters including a training center with 20 Sun Sparc Workstations running the Dealer Review Advisor AI Expert System world wide.
- GM Charlie AI Vibration Analysis Expert System:
  A vibration analysis expert system for assembly line maintenance built using and EDS proprietary expert system tool on a Unix platform.
- GM Joint Design Assistant AI Expert System:
  Worked in tandem with Advanced GM Engineers developing an expert system for automobile joint design using the Kappa PC Expert System Development Environment
- GM Supplier Pull Bridge:
  Developed a GM part ordering application for 20 plants using Visual Works Smalltalk and Informix database.
- Caterpillar Warranty Repair Advisor Expert System:
  Consulted on design for remote imaging of Cummins Diesel manuals for field mechanics using OOA/OOD methodologies and Toolbook development tools.
- NeoData Service Request Manager System:
  Designed an Ad Hoc query system for NeoData advertising using OOA/OOD.
- Avista's Enterprise Work Management System using Smalltalk and OOA/OOD.
- Avista's GIS Regional Outage Dispatch Monitor (First production GIS application at Avista)
  From paper to digital traceable Geo-network geodatabase.
- Avista's GIS Outage Management system with core feeder switching algorithm
- Designed and implemented GIS Outage Management's back end geodatabase management process.
- Avista's Mainframe CIS Messaging-to-ADO Oracle transformation algorithm
- Implemented ESRI Lab's GIS QuickCapture tool for real-time photo capture via drone, helicopter, vehicle, etc. for facility flying and vegetation management.
- Implemented one of Avista's first Web services which still functions today.
- Implemented first GIS application fault tolerant and self correcting Outage Analysis server The basis for all 300+ GIS application servers
- Developed, deployed, and maintained "Mapbook" Avista's fielded GIS Facility mapping laptops online/offline solution functioning for many years now.
- Mobile code and data extraction processes for scheduled fielded laptop code and data updates.
- Integrated ABB Service Suite's order processing capabilities into Mapbook to enable crew order fielding, completion, and centralized updating of crew orders.
- Created Microsoft SSIS data conversion from Oracle geodatabases to mobilized SQL Server geodatabases.
- Created automated data extraction and conversion of GIS data for timely updates of mobilized code and data to fielded devices.
- There are 500+ field crew workers and office users of Mapbooks.
  It is the most highly leveraged GIS application at Avista. It is one of Avista's core competencies enabling high value efficiencies and service levels.
- I build the first significant GIS application at Avista following our ICE Storm.
  It has produced high value returns over decades including enabling Smart City federal multi-million dollar grants.
- Integrating Mapbook mobilized code and data to sync with Avista's latest GIS system conversions into General Electric GIS products.

Emerging Technology Solutions: Roles

- President of Reynolds Geospatial LLC (President)
- GM AI Expert Systems Knowledge Engineer partnering with GM advanced engineering staff with a

core mission to bring emerging technology into General Motors.

- GM Charlie AI Expert Systems Knowledge Engineer. AI Vibration Analysis Expert System monitors assembly line and other devices with vibration signatures against a baseline for early detection and scheduled maintenance saving on highly expensive line breakdowns.
- GMAC AI Expert Systems Knowledge Engineer. AI Expert Dealer Review Advisor AI Expert System provides early warning and mitigation for potentially expensive dealership bankruptcies.
- GMAC Unix System Administration supporting company wide dealer financial review and a training lab for AI Expert System reviewers. AI ROI does not occur when its systems are down.
- GIS Solutions architect designer and implementer for ESRI GIS facility conversion and Utility Industry solutions at Avista. We received the coveted ESRI Special Achievement in GIS award "SAG" in competition with over 100,000 candidates.
- GIS Solutions architect designer and implementer for Avista's ArcGIS Server Online and portal architectures to enable its many critical GIS solutions to various internal, external, cloud based, and mobilized platforms.
- GIS Solutions architect designer and implementer for integration of engineering data from PI Coresight showing real-time facility state.
- GIS Solutions architect designer and implementer for Avista/ABB Service Suite order processing including offline/online fielded jobs and data collection and showing the location of trucks and fielded service orders and supporting their scheduling.
- GIS Solutions architect designer and implementer for Avista/ABB Service Suite server design and setup across all environments and CSS, Maximo, Biztalk, AFM/GIS, ABB, and other ATLAS project members.
- GIS Solutions architect designer and implementer of Visio diagram for all ATLAS project teams and with the Mobile workforce architecture. It was used to secure approvals from the ETER Technical review for all server hardware configurations.
- Senior Fujitsu Consultant contractor working with Avista's GIS team and with their GIS Custom and GIS COTS teams as well as Fielded Geospatial applications since July of 2014.
- Leveraged a Gartner Consulting Group consultant to keep abreast of IT and Utility Industry models, architectures, changes and opportunities.
- Avista's SDE Geodatabase Administrator, Oracle, SQL, PLSQL, data access integration.
- Avista's Senior Geospatial Developer.
- Avista's Gas data conversion technical lead.
- Avista's User Group facilitator, Systems Engineer, and AFM Infrastructure Architect.
- Avista Solutions architect designer and implementer for Avista's emerging object-oriented applications.
- Avista Solutions architect designer and implementer for Avista's Work Management application and its customized Compatible Units facility construction components leveraged throughout its many core Facility management, Outage Management, Maximo, and Mobilized systems.
- Certified SCRUM Master. Early Adopter of Agile development.
- Function Point software estimation models: class and early adoption.
- Technical Director, linux administrator and system networking engineer for University Of Utah's Center of Excellence for Micro Analysis and Reaction Chemistry.

Avista's suite of ESRI Geospatial applications include:

- Mapbook, a crew laptop fielded application with new order assignments, spatially enabled order location, processing, and order completion, including online/offline data sync and new order creation in the field.
- Mobile code and data extraction processes for scheduled fielded laptop code and data updates.
- Outage Management,
- Gas and Electric Edit,
- Gas and Electric Design,
- Gas and Electric Service Orders,
- Gas and Electric Trouble,
- Compliance,
- Engineering Analysis,
- Map Production,
- Street Lights,
- Forestry,
- Real Estate,
- Claims,

- Metering,
- Mobile Gas and Electric orders including trouble calls, compliance inspections and reporting.

SmartGrid technologies:

- Grid-based Continuous Meter Monitoring, Individualized Energy Delivery with localized controls, and Automated Feeder Switching for instantaneous energy response, notification, and restoration.
- AFM has integrated GIS in innovative ways with most core IT enterprise architectures at Avista.

Talent Show (technical skills)

Methodologies:

- Agile/SCRUM Development Model,
- Enterprise level application architecture integration diagrams,
- Test Driven Development,
- Visio UML Modeling (Sequence Diagrams, Class Diagrams, Use Cases),
- ESRI common shared Gas and Electric Models,
- Agile data conversion test scenarios,
- Object Oriented Analysis,
- Object Oriented Design,
- Visio Spatial data model generation/ATL,
- Entity Relationship Diagrams

Tools and Skills:

- ArcGIS Enterprise and Online,
- ArcGIS Survey123,
- ArcGIS Field app,
- ABB Service Suite administration,
- SqlServer geodatabase administration and SQL,
- Microsoft SSIS,
- Safe Software's Feature Manipulation Engine
- (FME is also embedded in ArcInfo data interoperability extension),
- ESRI Model Builder,
- ArcCatalog geodatabase administration,
- ArcMap data access with relationships and joins,
- ESRI Coverages,
- ESRI shape files,
- Unix administration and programming skills,
- Microsoft server administration and DOS Batch and PowerShell scripts,
- Beyond Compare (File comparison tool),
- C# .Net,
- VB,
- Python and Pycharm Pro
- Visual Studio Enterprise with team tools,
- TFS,
- bug tracking,
- Microsoft Office Applications including MS Project,
- XML/DOM/XSL transformations,
- Web Services,
- Visual Studio testing tools,
- Mainframe CICS Host Components,
- MS Host Integration Server,
- IBM WMQ messaging,
- Visual Age Smalltalk,
- Park Place Smalltalk,
- Digitalk Smalltalk,
- Borne Shell,
- ADO record sets,
- COM,
- Expert Systems (KappaPC, Information Builders, S, Lisp),
- MVC,
- ICS transactions,

- Knowledge Geodatabase Design,
- Knowledge Acquisition,
- Knowledge Engineering,
- ASP.NET,
- IIS setup and administration,
- TCP/IP port and pipe communications,
- Remote Procedure Calls,
- GPS card programming interface,
- Remote user administration (Remote Admin),
- Remote server administration (MS Remote Desktop),
- Radia for enterprise-level application deployment,
- Windows Scripting Host (WMS).

Database:

- Oracle Geodatabase 11g/12C/19C,
- ESRI SDE Geodatabase,
- ABB Service Suite Operational and Historical databases
- Oracle SQL,
- Microsoft SSIS ETL; Oracle to SQL server integrations,
- Personal Geodatabase,
- File Geodatabase,
- Access Database,
- Microsoft Sql Server
- Oracle SqlPlus,
- Oracle SQL Developer,
- Oracle PLSQL Stored Procedures, triggers, custom locking, Oracle DDL and DML,
- ESRI SDE Geodatabase upgrades, Multi-version views, SDE Administration, SDE service,
- SdeTable/SdeService and other SDE command line tools, SDE License Manager, SDE License
- checkout/checkin,
- ArcMap geodatabase access and session versioning,
- ArcCatalog geodatabase administration of SDE connections, geodatabases, permissions,
- feature and object
- classes, SDE coded domains,
- Data Entity One-to-One/One-to-Many/Many-to-Many feature relationship tables,
- Spatial Queries,
- Expert System Knowledge geodatabases

Awards

- Avista's GIS Team won the ***"ESRI Special Achievement award (SAG)"*** at their annual conference ***chosen from more than 100,000 organizations for excellence and innovative use of GIS technology***.
  The innovative use of GIS technology was for geopositioning Avista's gas and electric facility, converting it from paper to ESRI geodatabases, and enabling GIS application development using their ArcObjects api.
- As an Avista GIS Solutions architect designer and implementer I was a major contributor for this innovative use award.
- Since then our GIS team has continued to be recognized with several more ESRI conference presentations over the years.
- I was formally recognized by Avista leadership for my role in Avista's *ground-breaking GIS Outage Management application*.
- Our Avista GIS team worked closely with ESRI and Telvent teams to develop collaborative gas and electric models for GIS development evolving into their current formalized models.
- Esri continued to develop their models over the years from our collaborative models so upgrades and conversions have been simplified and facilitated including for the recent General Electric GIS component integrations.
- We did not receive an Award for those designs but Avista has received a significant reward for those innovative designs. ESRI awarded Avista with free products that lasted for 10+ years in exchange for being an early adopter and an innovative risk taker for their ArcObjects application development solutions.
- Avista Project Compass Award for extensive upgrades and integration of their core enterprise and GIS

systems. All architects, designers, and implementers were honored for this successful implementation.

Employment History

- **2024-present** Senior Solution Architect at Reynolds GeoSpatial LLC, developing a fail-safe event security solution for an armed guard radio network needing no internet or LAN network through the use of innovative voice and data radio mesh networking covering 1 to 3 miles. This architecture uses Sqlite db, single page applications (SPA's), Docker Compose Desktop, voice AI, Speech To Text, AI rules engine and neural network for message classification and automation, Audio segmentation, Fast API, Pycharm, Java, Maps with movable geo-location of incident and guard pins, incident creation, status, resolution, image capture, logging for event retention, dead-man level detection for state of the art guard protection with all guards on the mesh instantly alerted, and much more. As a Senior Solution Architect, innovator, and developer I continue to deliver exceptional value through the innovative use of advanced emerging technologies including embedded AI integrations.
- **2006-2024** Reynolds Geospatial LLC, Fujitsu Senior Software Consultant contractor (Avista GIS team account) Spokane, WA
- **03/2005-03/2006** ESRI GIS Spatial Database Engine Administrator for Douglas County, CO Castle Rock, CO
- **1994-2005** EDS Enterprise Systems Engineer at Avista Utilities in Spokane, WA. SME OOP Enterprise systems.
- **1988-1994** AI Knowledge Engineer at EDS Artificial Intelligence Services Group (General Motors Tech. Center in Troy, MI)
- **05/30/1981-01/30/1988** Technical Director and system networking engineer for University Of Utah's Center of Excellence for Micro Analysis and Reaction Chemistry.

Education

University of Utah (1988)
B.S. Finance (Cum Laud) (Including courses in risk Management, Operations Design/Management, Accounting, and Statistical Analysis)

Training

- ABB Service Suite Integration Workshops including Technical Specifications and Architecture.
- ABB Service Suite Server Monitoring and Maintenance.
- ESRI ArcGIS Systems Administration course.
- Microsoft .Net training course,
- VB/COM application development course,
- ESRI GIS Developer's conference,
- EDS Intensive Function Point Analysis Training,
- Knowledge Engineer Development graduate (EDS Artificial Intelligence Services),
- EDS Object Oriented Analysis/Design training,
- EDS System Engineering Development graduate,
- EDS Quality Management Training,
- EDS Systems Life cycle training.

Utility Industry Articles

- Energy Currents Summer 2001, "industry-Standard Open Technology Helps Utility Develop New Integrated IT/Business Processes" http://www.esri.com/industries/gas/business/~/media/files/pdfs/industries/gas/pdfs/enercur-gas-utility.pdf

- Energy Currents Fall 2004, "Utility Networks for Avista" http://www.esri.com/industries/electric/solutions_guide/~/media/files/pdfs/library/newsletters/energycurrents/energyfall2004.pdf

- Avista Utilities Enterprise GIS 2004 Project Report, "Developing Gas and Electric Tools using GIS" Avista Smart Grid Demonstration Project http://www.electricenergyonline.com/?page=show_article&mag=75&article=607

References

References will be provided upon request.