

TONY GALLUSCIO

Independent Technology Consultant

Bringing Clarity to Complex Technical Problems

PROFILE

I am a technology consultant, software architect, and former Fortune 500 executive who helps organizations understand complex technical situations, reduce risk, and get to practical solutions. I work at the intersection of business and technology - integrating systems, diagnosing software and data problems, assessing important technical decisions, recovering troubled projects, and designing and implementing AI systems where they provide practical value.

My approach: understand the business objective and how the system actually works, identify the root problem, evaluate the alternatives, and determine the most practical path forward. I can assess and recommend, implement the solution, or work alongside an existing team to get it done.

CONSULTING CAPABILITIES

AI Systems & Integration

Systems Integration & APIs

Enterprise & Solution Architecture

Data Integration, Migration & Quality

Vendor Independence & Technology Alternatives

Technical Problem Solving & Software Recovery

Technical Assessment & Due Diligence

Application & Legacy Modernization

Process & Workflow Automation

Technical Organization Assessment

SELECTED RESULTS

Built an early production generative-AI content system. Began integrating the OpenAI API into production systems in February 2023, designing and developing software that combined database content, product taxonomy, structured prompts, automated generation, validation, and persistence. Used the system to generate more than 14,000 category descriptions in its initial production run and subsequently expanded the approach to brand content, SEO metadata, and product content.

Designed and operated private AI infrastructure at production scale. Built an on-premises multi-GPU AI environment using local models and an OpenAI-compatible API, allowing production applications to use privately hosted inference. Expanded the system to four GPUs and operated it continuously on large-scale workloads, including generating rich, differentiated content for 6.9 million products in 95 days.

Built a hybrid AI classification system for approximately 300,000 products. Combined vector search with locally hosted LLM inference to narrow thousands of possible classification codes to a small set of relevant candidates and make the final classification decision with supporting rationale. Developed multiple QA methods to evaluate results at scale. The classifications were independently reviewed, approved by the responsible contracting authority, deployed to production, and remained in use without significant classification problems.

Recovered a mission-critical government software program during a leadership crisis. Chosen to take over a complex software program representing more than half of the company's business after its senior technical leader departed without turnover. Rapidly learned the distributed system, relocated and reestablished the lab and simulators, maintained the next scheduled delivery, resolved a critical performance issue, and rebuilt customer confidence.

Reduced infrastructure costs by more than 90%. Led migration of a production enterprise platform from AWS to owned data-center infrastructure, cutting recurring costs from about \$25,000 to under \$2,000 per month with only minutes of downtime.

Solved scalability at more than four million products. Redesigned product-data responsibilities when the existing commerce platform reached its practical limits, creating a scalable NGINX/PHP/Elasticsearch architecture.

Built integrations across fundamentally different systems. Designed extensible integrations spanning REST APIs, ANSI X12 EDI, cXML, SFTP, and custom file formats across procurement, supplier, accounting, CRM, marketplace, and marketing systems.

Performed technical due diligence supporting acquisition decisions. Evaluated technologies and potential acquisitions as a Fortune 500 engineering executive, using technical analysis, use cases, and working prototypes to validate capabilities and expose risk before investment decisions.

Delivered high-reliability spacecraft software. Led development of specialized Boeing spacecraft-component test software; delivered on schedule and budget with zero problem reports at Site Acceptance Test, resulting in follow-on work.

Led successful government healthcare interoperability delivery. Led the technical volume of the winning proposal on a healthcare program of national importance. Executed program on schedule and within budget, achieving a 100% award fee and securing option-year awards.

EXPERIENCE

Veratics, Inc. | Founder & Principal Engineer

Founded a technology company serving government customers that subsequently developed a large industrial-supplies procurement platform. Architected and operated systems supporting millions of products and significant transaction volume while remaining hands-on across architecture, integrations, data, infrastructure, performance, and automation. Designed and built production AI systems using commercial APIs and privately hosted local models, including large-scale content generation, retrieval, and classification workflows.

Harris Corporation | Technology Executive & Engineering Leader

Progressed from Chief Software Engineer through engineering management, product and program leadership, and Vice President of Enterprise Solutions. Led government and commercial technology programs spanning battlefield communications, healthcare interoperability, enterprise integration, technical due diligence, product development, and engineering organizations; held commercial healthcare P&L responsibility.

Software Technology, Inc. | Chief Software Engineer / Software Engineer

Designed and developed mission-critical distributed spacecraft command-and-control systems across architecture, APIs, operating-system abstraction, communications, security, telemetry, GPS ground systems, hardware interfaces, scalability, and performance. Progressed through six engineering levels to Chief Software Engineer for the flagship product.

United States Marine Corps | Sergeant

Persian Gulf War veteran. Served in infantry leadership and armory administration roles. Early use of computers to automate manual processes helped inspire a career in computer science.

EDUCATION & ACCOMPLISHMENTS

M.S., Computer Science - Clemson University

Postgraduate Studies (40 credit hours) - Computer Science and Mathematics, Clemson University

13 U.S. Patents - Distributed systems, quality of service, interprocess communication, data synchronization, and related software technologies

Executive Education - University of Virginia, Darden School of Business

Eagle Scout