

ANTHONY TRISTAN

San Antonio, TX | (210) 807-4946 | <https://anthonytristan.info> | anthony.tristan@gmail.com

SKILLS

Programming Skills: C#, [VB.NET](#), SQL, Python, Java, JavaScript, Visual Basic, HTML/CSS, Docker, [ASP.NET](#), MVC/MVVM, WPF, SSIS, SSRS, Telerik, Infragistics, Git, OAuth, Jira, Visual Studio, Visual Code, Team Foundation Server, PHP, jQuery, Bootstrap, Angular, Oracle, Unix/Linux, Visual Studio, Visual Code

Theoretical Knowledge: ETL | ML | LLM | ggplot | NumPy | Pandas | Scikit-learn | Object-Oriented design | Domain Driven Development | Design Patterns

Education: University of Phoenix

Majors: Information Systems | GPA: 3.85

Graduation Date: 2007

EXPERIENCE

Automated Integration Technologies

Spring Branch, TX

Senior Software Engineer

Jan 2025 - Dec 2025

- Spearheaded development of a responsive website using React and Tailwind CSS, incorporating data visualization components to enhance user engagement and boost page load efficiency by 40%.
- Engineered eClinicalWorks API integration with OAuth2, OpenSSL, Curl, PostMan, and a custom C# middleware layer, streamlining secure data exchanges and reducing integration errors by 50% while handling over 1,000 daily queries.
- Designed AI-driven chatbot and model training pipelines using Microsoft Azure Foundry and Python, analyzing large healthcare datasets to improve query response accuracy by 65% and enable real-time analytics.
- Implemented Microsoft Azure Search Services for vector and semantic search capabilities, optimizing data storage and retrieval processes to cut search latency by 70% and support scalable analytics for enterprise users.
- Managed continuous integration and deployment workflows leveraging Team Foundation Server and Git for version control and data migration scripts, resulting in a 30% faster release cycle and enhanced data integrity across production environments.

Baytek International

Corpus Christi, TX

Senior Software Engineer

Aug 2023 - Feb 2024

- Developed optimized SQL queries and VB.NET code for LIMS training system enhancements, improving data retrieval performance by 35% and enabling faster user training cycles.
- Managed knowledge transfer initiatives for team of 12 for the LIMS training platform, documenting processes and training team members to reduce onboarding time by 40% and ensure seamless operational continuity.
- Spearheaded migration planning from PHP to .NET Core architecture, analyzing legacy code and designing modern data structures to enhance scalability and maintainability for future expansions.
- Implemented early-stage artificial intelligence integrations to automate repetitive development tasks, streamlining workflows and reducing manual coding effort by 25% through intelligent code suggestions and pattern recognition.
- Utilized Git/TFS for source control management across the project, enforcing branching strategies and code reviews to maintain data integrity and achieve zero merge conflicts in critical releases.

SwRI

San Antonio, TX

Senior Software Engineer

April 2023 - August 2023

- Engineered optimized SQL queries and C# code enhancements for the Div 10 portal system, improving data retrieval performance by 40% and supporting faster analytical reporting for internal stakeholders.
- Spearheaded knowledge transfer for the Div 10 portal, creating comprehensive documentation and training sessions that reduced onboarding time for new team members by 35% and ensured uninterrupted system support.
- Designed and documented a strategic migration path from legacy architecture to .NET Core, analyzing existing data structures and code patterns to minimize downtime and enable future scalability improvements.
- Maintained and updated the Div 10 portal system using Git/TFS/Jira for source control and issue tracking, enforcing branching strategies and code reviews to achieve zero critical production incidents during the engagement.
- Collaborated on system enhancements involving relational data modeling and query optimization, leveraging advanced SQL techniques to streamline data storage and access, resulting in a 30% reduction in average query execution time.

PROJECTS

CryptoQT

Sept 2025 - Present

- Developing automated trading bot in Python using Pandas, NumPy, and Backtrader to fetch and analyze real-time crypto data from APIs like Binance, resulting in successful backtesting of strategies with simulated profits exceeding \$100 in paper trading scenarios.
- Optimized quantitative strategies including MACD and momentum models by implementing volume filters and dynamic thresholds via TA-Lib, improving strategy stability grades from C to A and reducing volatility sensitivity by 40% in high-volume day-trading simulations.

- Conducted novel behavioral proxy research by designing and implementing data pipelines that integrated X (Twitter) API signals with unconventional behavioral proxies, such as astrology transits, to augment sentiment analysis for crypto price forecasting. By correlating these alternative indicators with traditional time-series market data, I improved predictive signal reliability by 25% during extensive backtesting..
- Documented and commented code modules (e.g., bot.py, main.py) with educational summaries for junior developers, incorporating risk management metrics like Sharpe Ratio and VaR, enabling efficient troubleshooting that cut error resolution time by 50% across iterative development phases.