



APPLIED
VISIONS 

V I S U A L S O L U T I O N S T H A T M A K E T H E C O M P L E X S I M P L E

➤ ABOUT AVI

Applied Visions has a long history of creating innovative visual software solutions to solve complex problems. Our team combines top talent in research, engineering, product development, and interaction design with a practical approach to software development. From commercial products to national security applications, we develop technology for some of the world's most impactful organizations – including the Department of Defense, the intelligence community, and Fortune 500 organizations – addressing some of their most pressing challenges.



Our Secure Decisions division represents leading-edge thinking in using visualization for national security needs, including information assurance, infrastructure protection, cyber security, and intelligence analysis. Secure Decisions helps decision-makers make sense of it all by developing visual tools to analyze massive amount of data, creating deeper understanding, and enabling timely decisions.

AVI is a 100% US-based and US citizen-staffed company, with the ability to conduct classified work to the highest levels. The government trusts AVI to develop cutting-edge technologies to serve the warfighter, and businesses hire AVI to serve their highly-sensitive software engineering needs, get their products to market, and developing products that win awards and deliver return on their investment.

CAPABILITIES

Our capabilities include custom development of user-centric applications, serious games applications that apply gaming technology to real-world problems, and visualization for information security and infrastructure protection. Our experience has helped us to become a leading provider of services including system architecture design, cyber defense consulting, project planning, and ghost writing.

Over our more than twenty years of existence we have developed a number of core competencies:

VISUAL INTELLIGENCE

We know how to craft informative visual software interfaces to make sense of complex multi-dimensional information.

NATIONAL SECURITY

We understand security challenges across multiple domains, from command and control to cyber security. And we know how to work with the defense and intelligence community, including the ability to work at all levels of classification.

CUSTOM SOFTWARE

We have deep experience in building complex software to meet specific operational and commercial goals. From internal IT applications to award-winning commercial software products, we can be a software engineering partner for the most demanding applications.

SERIOUS GAMES

We can leverage the wealth of research and development that has gone into the computer gaming industry to craft applications that provide visually-rich interactions in a gaming environment that is second-nature to today's generation.

BUSINESS INTELLIGENCE

We understand business applications, and we have the interaction and visualization skills to create applications that bring out the value in financial and operational data.

SECURITY VISUALIZATION

We are recognized leaders in the application of visual intelligence to cyber security.

SOFTWARE ENGINEERING

Across all of these spans the discipline of software engineering: creating high-quality software on time, and on budget. Our experience and capabilities range from requirements analysis through interaction design, system architecture, implementation, and life-cycle QA.

CULTURE

We are a company founded on a simple premise: Bring together great people, great ideas, and great customers, and you'll deliver great results. We thrive on bringing together professionals with experiences, characteristics, and perspectives that are as diverse as the problems we solve. We're highly talented, strongly motivated, and inspired by working as a team to rethink the way things have been done to deliver great results for our customers.

PRACTICE AREAS

Our work falls into three general areas of expertise: command and control,

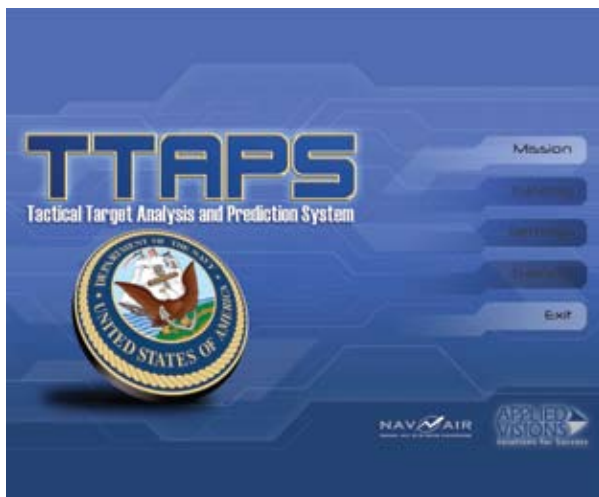
COMMAND AND CONTROL

Our Command and Control research and engineering team is known for developing exceptional visualization software for Serious Games. Our particular focus is on Delta3D, an open-source gaming and simulation engine that is supported by the MOVES Institute – the Defense Modeling and Simulation component of the Naval Postgraduate School. Applied Visions has worked closely with the MOVES institute, collaborating on new applications of Delta3D, and on new features for the engine itself.

In addition to our Delta3D development, we have packaged our Serious Games expertise into Applied Visions' Game Bridge interface component. Game Bridge technology bridges the gap between command and control data sources and computer game engines, and has been applied in a number of training and gaming systems.

Two of our most prominent successes in this space are technologies that serve the mission planning needs for UAV and convoy operations: our TTAPS and AVIsor platforms.

TTAPS



Applied Visions' Serious Games concepts are embodied in our Tactical Target Analysis and Prediction (TTAPS) platform. TTAPS visualizes potential targets in a realistic three-dimensional environment, and – through the physics simulation capabilities of Delta3D coupled with innovative artificial intelligence algorithms – predicts the movement of those targets through the environment. This makes targets easier to find, and improves resource utilization in addressing those targets.

AVISOR

Applied Visions' AVIsor is a decision-support tool that gives convoy route planners tactical advantage in the field: enabling the safest possible movement of convoys through complex urban environments. AVIsor uses the Delta3D simulation engine to combine complex information from topographic, satellite, and both geographic and human terrain sources to enable planners to see a clear path to safety.



We are creating a commercial computer game from this platform, GAUNTLET, to let everyone experience the challenge of navigating a convoy through hostile territory. This game will be available shortly after the completion of AVIsor.

VISUAL TOOLS AND PRODUCTS

From the beginning, Applied Visions has been developing applications that create competitive advantage for our customers. We specialize in conceiving, developing, and enhancing commercially available software products and systems. Our engineering teams are experienced with the latest visualization, Web, database, and Windows technologies.

Applied Visions has developed – “ghost-written”, in essence – software titles, web applications, demos, and prototypes for clients including Konica Minolta, Hallmark, Reuters, CA, and many others.

We are also creating our own visual tools to serve the needs of the software engineering community. The first of these is CodeFacts, which grew out of research conducted for NAVAIR to support their software engineering needs. Here are just a few examples of our work in this area:

CODEFACTS

Looking to improve the state of your software? CodeFacts can help. CodeFacts will revolutionize how you measure your development state by digging deep into your codebase and development history to extract key datapoints and presenting them in beautiful dashboards and visualizations. From bird’s-eye to microscopic views, CodeFacts will gauge your application’s health.

- » Observe key development stability measures
- » Quantify your codebases’ quality and fitness
- » Assess your documentation practices
- » Measure your team’s activity levels



CodeFacts grew from research we performed for the Navy under an SBIR contract designed to give the Navy better tools for maintaining complex operational software.

VISUAL TOOLS THAT EMPOWER BUSINESS

AVI builds visually-rich custom software solutions that make it easier for companies to leverage their business data for competitive advantages. Our visual approach simplifies the use of business intelligence information to fit our clients’ end-user needs.



One example is our work for Nielsen, one of the world’s leading marketing and media information companies (formerly ACNielsen). Their core business focuses on measuring and analyzing how people interact with digital platforms, traditional media and in-store environments – locally as well as globally. They provide usage information to enable companies to understand consumer trends.

When Nielsen identified a need for technology that could collect, track and analyze massive amounts of data collected from store and household panels, they sought out Applied Visions as a partner. For over 15 years, Applied Visions has provided large scale, high-performance, and data warehouse reporting technology to enable Nielsen to simplify and understand report collected panel information. This capability has made Nielsen known in the industry as the premier provider of customer buying behavior by demographic, attitude, and usage.

THOMSON REUTERS METASTOCK

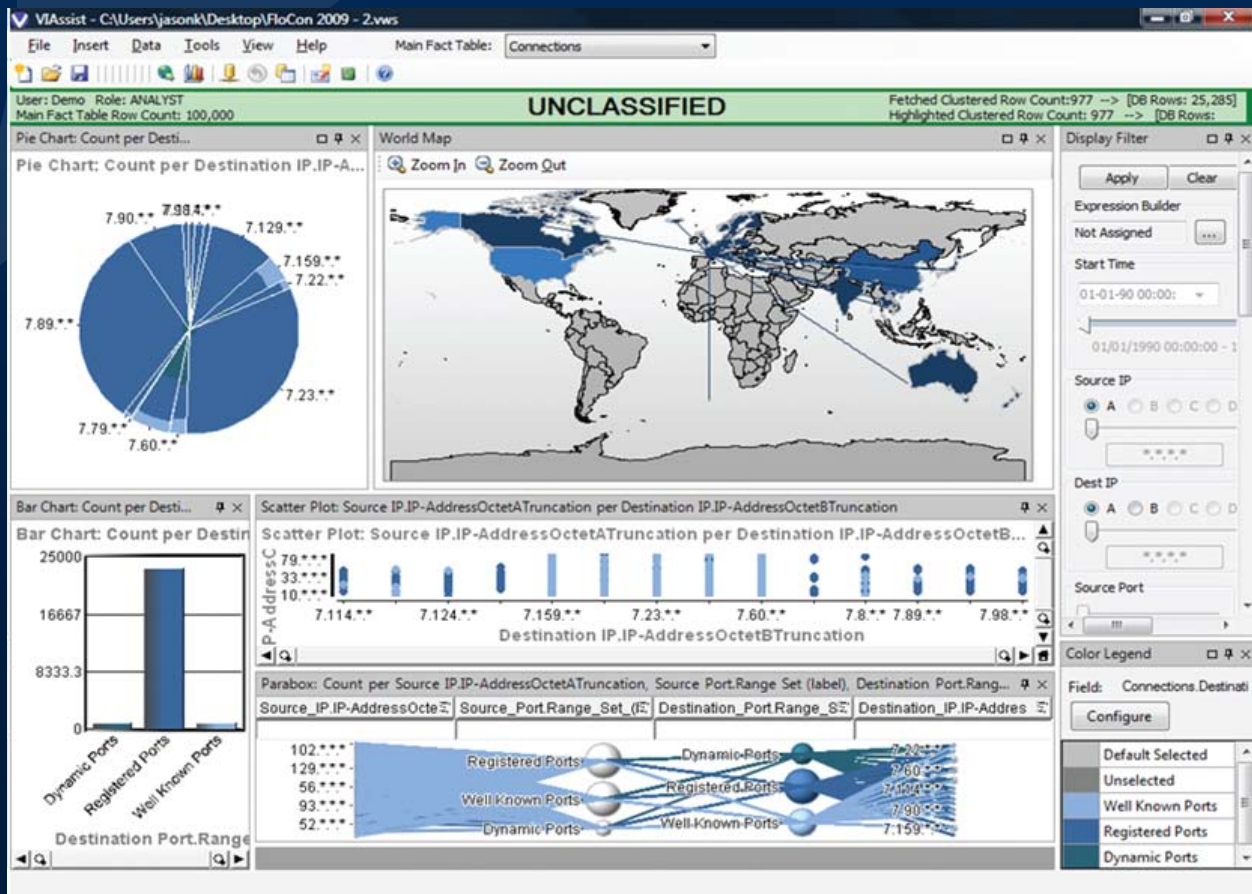
Thomson Reuters is the world’s premier global information company known for providing information tailored for professionals in the financial services, media, and corporate markets. We have worked with them for years to create tools used by investors to analyze the performance of stocks and commodities.

The most recognized brand in the charting and technical analysis arena is MetaStock®, an award-winning product aimed at providing investors and professional traders with visual understanding of their data. The product is a result of a successful collaboration between Applied Visions and Thomson Reuters for more than seven major releases over the last decade. Working together with Thomson Reuters analytics, Applied Visions has developed the unique user interface and the overall application architecture. MetaStock® is a Windows Certified Product.



CYBER SECURITY

Applied Visions created the Secure Decisions division to focus on research and product development of advanced visual analytics for cyber security; tools that make sense of your data. Secure Decisions is focused on applying visualization technology to information security needs, including information assurance, infrastructure protection, cyber security, and intelligence analysis. Secure Decisions creates visual decision support tools that analyze massive amounts of data for more accurate and timely decisions; our MeerCAT® and VIAssist™ visualization products represent two of the many tools we've created for analysis of cyber security data.



CUSTOMERS

Our capabilities and integrity have earned long-term and trusted relationships with many customers in a diverse set of industries. We are pleased to count the organizations listed below among our valued customers.

DEFENSE AND CYBER SECURITY

- » BAE Systems
- » ITT
- » Lockheed Martin
- » Northrop Grumman
- » Raytheon
- » Science Applications International Corporation (SAIC)
- » Symantec
- » The Johns Hopkins University Applied Physics Laboratory

FINANCE AND RESEARCH

- » InterbankFX, LLC
- » Nielsen
- » Thomson Reuters

GOVERNMENT

- » Air Force Research Laboratory (AFRL)
- » Naval Research Laboratory (NRL)
- » Office of Naval Research (ONR)
- » Office of the Secretary of Defense (OSD)
- » Department of Homeland Security (DHS)
- » DARPA
- » NAVAIR
- » CERDEC
- » ARDEC

GRAPHICS AND TECHNOLOGY

- » Computer Associates
- » Hallmark Cards
- » Konica Minolta



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Track
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Pathfinding Analysis Use Terrain
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