



Founded in 2000, IIS is a small business located in New Jersey servicing the financial markets, the Regulated Utility, the evolving financial and healthcare compliance market place, and the Government Enterprise Architecture transformation requirement. Our team provides over 150 years of combined experience in process and operational management, technology innovation, and supply chain solutions. We achieve repeatable success in cultural change from concept to operations, acceptance of business/technology solutions, and exacting business profits.

Services Offered:

Business Solutions and Workflows: Innovative Web client software, application level data caching and customizable data taxonomy tree structure supports rapid prototyping and production level deployment of complex systems including: Private Social Network Solutions, Compliance Discovery & Reporting (Dodd Frank, NERC-CIP, HIPAA/HITECH), Global Real Time Monitoring, and Demand Forecasting. Solutions are tailored from our developed repositories offering fast deployment and economical technology change (server virtualization to cloud computing), application change (legacy to Java migration), and operational performance improvements.

Secure Mobile: Patented method for securing mobile devices using device sensors to create situational awareness, granularly limiting access to applications and data when operating in less secure locations, selectively sanitizing the device by removing only certain applications or data when the situation is determined to be below an acceptable security level, and protecting communications by leveraging the security state of the peer device (US 10,185,835, US 9,721,111).

Data Analysis: Grid Computing Design and Build solutions using CPU/GPU architecture; Monte Carlo Simulation; Data/event characterization utilizing frequency, likelihood, artificial neural network, multi dimensional event library matching (image recognition), event reconstruction/prediction, causal inference methods, cognitive maps, and recommender systems.

Solutions Focus: Event prediction and probability analysis; Asset and risk measurement with correlation to external data event; distributed and decentralized data storage; and continuing research and development in IoT, including Google Things and AWS Greengrass.

Data Science Services: IIS provides experienced CISSP security, PhD level data and system analysis, regulatory risk, workflow, automated or manual documentation generation, and program management consultants.

Programming Services: Specializing in Java, C++, C, Assembly, Android, PHP, JavaScript, ExtJS, SQL, NoSQL, MongoDB, Linux shell scripting, Solidity, Go, with other languages available. Solidity Ethereum smart contract development and code review including token/coin ERC20/223/777/820, off chain whitelisting, and custom scripts.

Embedded System Testing and Design: Microcontroller and FPGA programming and implementation; Raspberry PI, Arduino, MSP430, PIC, ATmega, Xilinx, etc; rapid prototyping and testing; power side channel analysis and hardening; algorithm optimization for speed and power; SIMON, SPECK, and other encryption algorithms. See <https://ia.cr/2017/382>

Automated Test Platform Design: Utilizing PCs or National Instruments controllers (PXI-e); creating custom automated test platforms (LabView or C#) with digital/analog data collection and generation, control of connected test equipment via GPIB, Ethernet, Serial, etc; creation of system-under-test procedures and software.

Distributed Sensor Systems: Rapid prototyping and small quantity production of sensor system integration, including distributed collection points, WiFi/Cellular/Radio connectivity, control server, and data aggregation, storage, analysis, and display.

