ADVANCING TECHNOLOGY . ADVANCING HUMANITY

DEVELOPMENT & SUSTAINMENT

SOFTWARE ENGINEERING

KEY CAPABILITIES

Low-Level Software • Embedded Firmware and Software • Custom Device Drivers • Third-Party Driver Integration • Critical Timing and Kernel Performance Tuning

Application Software • Full-Stack, Front-End, and Back-End Applications • Real-Time Data Processing • System Management, Monitoring, and Control • Data Format and Protocol Translation • Modularized Functional Chains • Performance Optimization • User Experience Customization

Cloud and Enterprise Software • Serverless Computing • Web Services • Hybrid Applications • Big Data Processing • Mobile Platforms

Agencies require reliable software solutions to support the effective performance of critical functions and enable the realization of program and mission objectives. Kurtek provides a comprehensive portfolio of software engineering services that combines robust software development lifecycle expertise, extensive full-stack development capabilities, and specialized domain and platform experience to deliver optimized solutions that provide best-of-breed functionality while meeting critical performance requirements and unique mission constraints.

Kurtek engineers are experienced with the design and implementation of custom software solutions

ranging from embedded firmware and device drivers to modular applications and web services, supporting target platforms from FPGAs to enterprise cloud environments. We provide a full spectrum of

software sustainment services, including technical support, user experience customization, performance optimization, and incremental enhancement to effectively maintain software solutions over the lifetime of a program.

Working with Kurtek gives you access to a proven combination of experience and expertise from across the global space industry. Our engineers have led the development and sustainment of numerous flagship space and ground systems, and their comprehensive knowledge, broad mission experience, and specialized skillsets enable us to deliver an effective solution for your unique needs.

REPRESENTATIVE PROGRAMS

- Designed and implemented a modular data processing software suite for interoperable service delivery across a global network of NASA and partner agency sites.
- Designed and implemented a high-performance big data pre-processing and cache optimization service, reducing enterprise dataset ingest and processing times by more than 50%.
- Implemented embedded algorithms for combining data from multiple communications links to correct signal degradation caused by site conditions.

To learn more about our capabilities, email us at info@kurtek.io or call our team at 703-943-7236.