GEISEL SOFTWARE

Capabilities Statement

Geisel Software, Inc. is a custom software development company with special expertise in embedded and application software solutions for the robotics and medical device industries.

Founded in 2011, Geisel Software has completed a variety of successful projects for the U.S. government, including the Department of Veterans Affairs, the U.S. Army and others. Our highly skilled team designs, develops and deploys groundbreaking software solutions that integrate seamlessly with existing software and hardware systems. With a history of working with the DoD and medical device manufacturers, Geisel Software is well-versed in incorporating the best security protocols into every aspect of the software development lifecycle. We serve federal and state government and commercial enterprises across the United States.

The Geisel Advantage

Expertise
Over **20 years of experience** across government, robotics, medical devices, embedded, and application development.

Industry Acumen
Expertise working with Medical standard and Government procedures such as **ITAR, HIPAA, ISO 13485, FAR, DFARS** and others.

Agile
We can quickly allocate **up to 15 full-time, U.S. citizen engineers**.

World-Class Talent
We hire only the **top 1% of developers** - over 100 applicants screened for every 1 engineer hired.

Technical Capabilities
Our **broad skill set** empowers us to choose the best technologies, tools and platforms for your project:

Robotics	RTOS
ROS	Embedded Development
UGV / UAV / UAS	Swarming Robots
Planetary Robotics	Independent Robotic Tasking
Application Software	Artificial Intelligence
Machine Learning	Autonomous Behavior
Localization and Mapping	Automation
Electronic Manual Conversion	Bluetooth
BLE	RF
Wireless	Encryption
Cybersecurity	Linux Device Driver
Kernel	Cloud
AWS	Azure
Android	iOS / iPhone / iPad
AngularJS	Real-time
Firmware	C/C++
Python	Java
JavaScript	Swift

DUNS: 039391327
CAGE: 7WMX6
Small Business Set-Aside

NAICS Codes

541511   Custom Programming Services

541715   Research and Development in the Physical, Engineering, and Life Sciences

541330   Engineering Services

541519   Other Computer Related Services

Full-Service Team

- Software Architecture
- Software Engineering
- QA/Testing
- UI/UX Design
- Program Management
- Security Expertise
- Content Creation

*"I highly recommend Geisel Software. We developed a transparent relationship with the Geisel team. They felt like an extension of our own team and **put in the extra effort needed to hit our incredibly tight deadline.** They were very flexible as our needs changed, working within our budget and schedule constraints to **deliver a quality product on time."***

- David Weatherwax, Director of Software FLIR Systems

Featured Client Projects

FLIR SYSTEMS UNIVERSAL OPERATOR CONTROL INTERFACE

Geisel Software was hired to expeditiously develop an operator control user interface (UI) for FLIR's lifesaving, bomb-defusing robots. It features a universal controller that allows operators to view and control other UGVs, as well as unmanned aircraft, for improved battlefield awareness. It was a large-scale, complex project with a compressed six-month timeline and mission-critical deadline. The easy-to-use touchscreen has picture-in-picture video streaming and offers multiple camera angles, manual joystick and touch screen integration, plus preset poses to rapidly position the robot. Geisel's software development, architecture, project management, UI/UX, JavaScript and SQA skills, combined with their expertise in web applications, robotics and security, helped FLIR to complete the project on time and within budget.

SAFE OPS SYSTEMS (SOS)

SOS Live is an enterprise-grade, edge cloud solution that connects and automates mission-critical equipment to provide rapid, real-time situational awareness to first responders. The virtual command platform integrates UAVs, cameras, sensors, and mobile devices. An AI-based application preemptively detects threats and equips responders with mission-critical information. Geisel Software was hired to create a first-of-its kind compact UAS proof-of-concept for police/fire department response in a large county in CA. GSI performed: requirements, architecture, software development, integration, demonstration. An iPad app user provided a target location, which directed the UAV to fly to the target, circle, stream video to the iPad app and remote browsers, and return to launch point. Communication was via WiFi and processing was performed on an on-site laptop.

CARBON BLACK LINUX

Carbon Black is one of the world's most respected security firms, delivering a form of application white listing that has taken the security world by storm. They hired Geisel Software to build the Linux version of their white-hot selling Windows application from scratch. The application itself is a Linux security module that winds itself into the Linux kernel to give it an added layer of protection against all kinds of malicious threats. This was a highly invasive Linux kernel project that spanned everything from module loading, to file compilation, linking, and execution, to memory mapping and even compiling C++ into the Linux kernel itself.

Partial Client List

Carbon Black	Clearmotion	Congruity 360
Dept. of Veterans Affairs	Dragon Innovation	FLIR
Harvest Automation	iRobot	Jibo
Mass. Dept. Of Education	Medica	Microlite
NuPulseCV	PharmAdva	PVPC
PSW	Safe Ops Systems	Sterilis Medical
Tufts University	University of Alaska	Wyss Institute at Harvard University