GEISEL SOFTWARE

Capabilities Statement

Geisel Software is a custom software development company with a passion for innovation and special expertise in embedded and application software solutions. As a small business concern, we've completed a variety of successful projects for the U.S. government, both state and federal, including prime and subcontract work and have been awarded a GSA MAS contract. Clients include the Department of Veterans Affairs and the U.S. Army, and we are actively engaged on an STTR with NASA. Our highly skilled team designs, develops and deploys groundbreaking software solutions that incorporate the most stringent security protocols.

We are committed to helping the federal government, including the Department of Defense, improve their supplier diversity. We attend NASA's HBCU/MSI events and are working in close collaboration with multiple HBCUs and MSIs, helping them increase their contracts and interaction with industry and small business. We are also working directly with NASA to help facilitate a more diverse intern group to help young people in disadvantaged areas. Geisel Software's Worcester, Massachusetts headquarters is located in a HUBZone.

The Geisel Advantage

Expertise
Over **20 years of experience** across government, robotics, embedded, and application development. CEO Brian Geisel was name **Massachusetts Small Business Person of the Year 2020.**

Industry Acumen
Expertise working with Government procedures such as **ITAR, FAR, DFARS** and others.

Agile
We can quickly assemble a team of any size of **U.S. person engineers** to meet project requirements.

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
ROS
UGV / UAV / UAS
Planetary Robotics
Application Software
AI/Machine Learning
Localization and Mapping
Electronic Manual Conversion BLE
Wireless
Cybersecurity
Kernel
AWS
Android
Firmware

Infrastructure as a Service (IAS)
Platform as a Service (PAS)
Embedded Development
Swarming Robots Independent Robotic Tasking Autonomous Behavior
Test Driven Development (TDD)
Continuous Integration/ Continous Delivery (CI/CD)
Automation
Bluetooth
RF
Encryption
Linux Device Driver
Cloud

Angular JS
RTOS
Python
JavaScript
Java
Azure
Swift
C/C++
OS / iPhone / iPad
Real-time

GSA CONTRACT HOLDER

CONTRACT NUMBER: 47QTCA20D00F9
SCHEDULE: Multiple Award Schedule
LARGE CATEGORY: Information Technology
SUBCATEGORY: Information Services
SIN: 54151S Information Technology Professional Services

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

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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.

"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*

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.

NASA SWARMING UAV/UAS SOLUTION

In collaboration with the University of Nevada Las Vegas, Geisel Software is developing new breakthroughs in swarming technology for NASA. These applications apply to not only ground and aerial systems, but can be applied to satellites, fixed point stations and other systems. Together, they provide their own sort of mapping and localization system that is similar to GPS, but not dependent upon it (i.e. could be used on other planetary bodies). With Geisel's unified dashboard technology, these applications allow for autonomous and human-directed tasks of a much larger scale.

Partial Client List

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