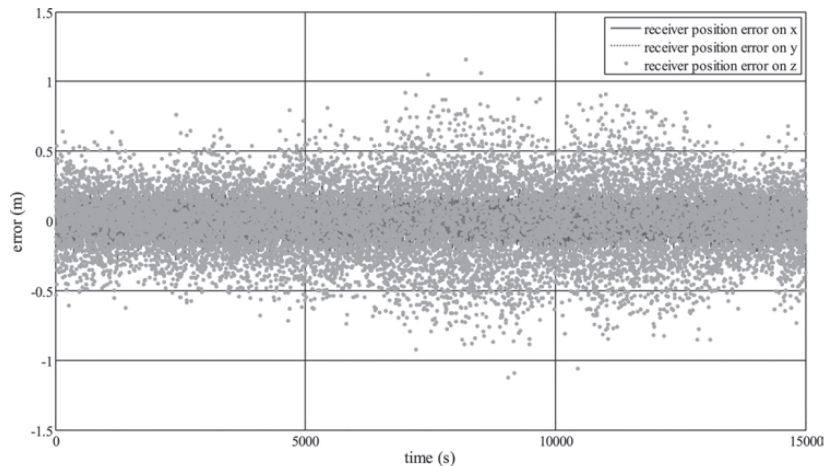
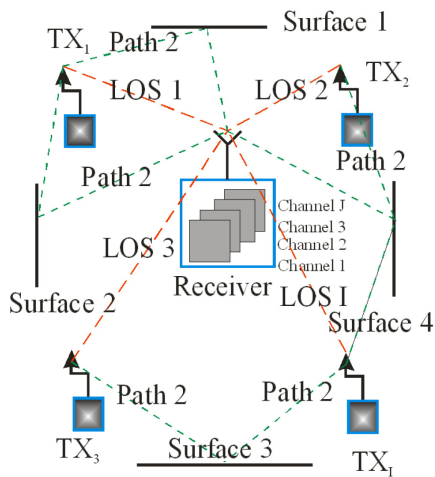




## Software

### Mission Statement



**Giftet® Global Software Solutions** are aimed towards developing, marketing, and distributing global software solutions for **Giftet® Navigator**, **Giftet® Aeronautical Navigator**, and **Giftet® Maritime Navigator** for Indoor Geolocation Systems, Geolocation of RF Signals, Geospatial, Geo-Information, Geo-Intelligence, Geo Referencing, GPS, GLONASS, Galileo, QZSS, and other Global Satellite and/or Pseudolite Navigation (or Positioning and/or Timing) Systems based on customer's needs.

*Ensuring the highest level of customer's satisfaction and at the same time the highest level of the professionally engineered, designed, developed, and delivered global software solutions.*

### Projects

Giftet will develop global software solutions during SBIR Phase II or III or during technology transition phase for **Giftet® Navigator**, **Giftet® Aeronautical Navigator**, and **Giftet® Maritime Navigator** for three types of indoor geolocation systems

1. C-CDMA pseudolite indoor geolocation system
2. MC-CDMA pseudolite indoor geolocation system
3. OFDMA pseudolite indoor geolocation system

First, the software design requirements of a C-CDMA pseudolite indoor geolocation system will include

1. C-CDMA system software design requirements



## Software

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2. C-CDMA pseudolite (or transmitter) software design requirements
3. (3)C-CDMA receiver software design requirements

Second, the software design requirements of an OFDMA pseudolite indoor geolocation system include

1. OFDMA system software design requirements
2. OFDMA pseudolite (or transmitter) software design requirements
3. OFDMA receiver software design requirements

### **Giftet® Navigator**

Giftet would like to collaborate with Giftet Government Agencies and Giftet Industry Partners during SBIR phase II or III and during technology transition phase such as Microsoft, Verizon Wireless, Qualcomm, LG, and Motorola etc. in developing **Giftet® Navigator**. Giftet® Navigator will have the ability to read Digital Terrestrial Chart (or Map) as well as GPS/GNSS/Pseudolite data and provide worldwide [terrestrial] cm level position accuracy 99.999% of the time using Giftet Intellectual Property (IP) Global Navigation Solution system and enable safe and extremely accurate terrestrial navigation for the US Army, Federal and State Law enforcement, US Department of Homeland Security, Government (Federal or State) agencies and government/US Military sponsored contractors however under the worst case scenario conditions such as (heavy multipath, lack of GPS signals, interference, jamming etc.) for which currently any GPS devices and/or systems offer ~100 m position accuracy.

The software design requirements of **Giftet® Navigator**

1. **Giftet® Navigator** system software design requirements
2. **Giftet® Navigator** signal software design requirements
3. **Giftet® Navigator** receiver software design requirements.

### **Giftet® Aeronautical Navigator**

**Giftet® Aeronautical Navigator** will have the ability to ability to read **Digital Aeronautical Chart®** anywhere from the 29 Digital Aeronautical Chart geographic regions, contained between 90° North latitude and 90° South latitude, and support a variety of Geographic Information System applications and also process GPS/GNSS/Pseudolite data and enable safe and very accurate aeronautical navigation for the US Air Force, US Navy, Government agencies and government/US military sponsored contractors. It is also anticipated that **Giftet® Aeronautical Navigator** will enable public sale of **Digital Aeronautical Chart®** in US airspace and worldwide.

The global software requirements of **Giftet® Aeronautical Navigator**

- (1) **Giftet® Aeronautical Navigator** software system requirements
- (2) **Giftet® Aeronautical Navigator** software signal requirements
- (3) **Giftet® Aeronautical Navigator** software signal receiver requirements

### **Giftet® Maritime Navigator**

Another example of Giftet® Global Software Solutions is **Giftet® Maritime Navigator** which will have the ability to read Digital Nautical Chart® anywhere from the 29 Digital Nautical Chart geographic regions, contained between 90° North latitude and 90° South latitude, and support a variety of Geographic Information System applications and also GPS/GNSS/Pseudolite data and enable safe and accurate maritime navigation for the US Navy, US Coast Guard,



Software



Government agencies and government/US military sponsored contractors. It is also anticipated that **Gifftet® Maritime Navigator** will enable public sale of Digital Nautical Chart in US waters and worldwide.

The global software design requirements of **Gifftet® Maritime Navigator**

1. **Gifftet® Maritime Navigator** system software design requirements
2. **Gifftet® Maritime Navigator** signal software design requirements
3. **Gifftet® Maritime Navigator** receiver software design requirements

## Global Software Solution Tutorials

Global Software Solution tutorials will include

**Indoor Geolocation Systems** [Phase II, Phase III SBIR or Transition Technology Phase] will include (1) Introduction to Software Design Requirements of Indoor Geolocation Systems; (2) Software Design Requirements of C-CDMA Indoor Geolocation Systems; (3) Software Design Requirements of OFDMA Indoor Geolocation Systems; (4) Software Design Requirements of MC-CDMA Indoor Geolocation Systems; and (5) A MATLAB toolbox and Simulink blockset library of intermediate realistic software design indoor geolocation system illustrations.

**Geolocation of RF Signals** [Phase II, Phase III SBIR or Transition Technology Phase] will include (1) Software Design description the RF signals, the RF signal spectrum from 100 MHz – 18 GHz and the geolocation requirements per application; (2) Description the software design geolocation techniques; (3) Software design Blind adaptive signal processing; (4) Software design Geolocation and digital beam-forming; (5) A MATLAB toolbox and Simulink blockset library which cover intermediate realistic geolocation of RF signals problems.

## Tutorials/Workshops

*November 12, 2013*, Dr. @ilirprogri, @GifftetInc President and CEO, attended a fabulous Real-Time Simulation and Testing Case Study – Brushless Electric Motor Control @MATLAB Burlington Marriot, One Burlington Mall Road, Burlington, MA 01803, 8:00 AM – 12:00 AM US/Eastern from The @ComSoc chapter of the @IEEEorg Worcester County Section (WCS) as a partner of MathWorks @MATLAB featuring leading industry experts. This was a fabulous opportunity to learn from @MATLAB experts about design challenges. There were about fifty people twenty-five of them @IEEEorg members. I don't know how many from @ComSoc.

*October 3, 2013*, Dr. @ilirprogri, @GifftetInc President and CEO, attended a fabulous Developing Measurement and Analysis Systems 2013 Joint Seminar @MATLAB Westford Regency, 219 Littleton Road, Westford, MA 01886, 8:00 AM – 11:45 AM US/Eastern from The @ComSoc chapter of the @IEEEorg Worcester County Section (WCS) as a partner of MathWorks @MATLAB Graphics featuring leading industry experts.

*September 24, 2013*, Dr. @ilirprogri, @GifftetInc President and CEO, attended a fabulous Mentor PCB Forum Seminar Boston Marriott Burlington Westford Regency, 219 Littleton Road, Westford, MA 01886, 8:45am - 4:00pm US/Eastern from Mentor Graphics of the @IEEEorg Worcester County Section (WCS) @ComSoc chapter as a partner of Mentor Graphics featuring leading industry experts.

*May 21, 2013*, Dr. @ilirprogri, @GifftetInc President and CEO, attended a fabulous 2013 Injecting Automation into FPGA Verification Seminar Boston Marriott Burlington 1 Burlington Mall Rd Burlington, MA 01803, 8:30am - 3:00pm US/Eastern from Mentor Graphics of the @IEEEorg Worcester County Section (WCS) @ComSoc chapter as a partner of Mentor Graphics featuring leading industry experts.

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Software



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*April 25, 2013, Dr. @ilirprogri, @GiftetInc President and CEO, attended a fabulous 2013 Design Conference at Westford Regency 219 Littleton Road, Westford, MA 01886 from @Agilent of the @IEEEorg Worcester County Section (WCS) @ComSoc chapter as a partner of @Analog Devices and Xilinx, @MATLAB MathWorks featuring leading industry experts presenting complete, signal chain, and system-ready solutions for your most complex design challenges.*

*April 9, 2013, Dr. @ilirprogri, @GiftetInc President and CEO, attended a fabulous seminar A+ Seminar Series-TestEquity at Best Western Royal Plaza Hotel and Trade Center 181 Boston Post Road West Marlborough, MA 01752 from @Agilent of the @IEEEorg Worcester County Section (WCS) @ComSoc chapter.*

*March 20, 2013, Dr. @ilirprogri, Giftet Inc. Chairman, CEO, and President and the @IEEEOrg @ComSoc chapter of the WCS attended a fabulous virtual conference organized by the MathWorks from 12:00 noon until 5:00 PM. The MATLAB Virtual Conference 2013 was opened by: 1. Keynote Speaker, Jim Tung, MathWorks Fellow, on Embracing Complexity. 2. Discover MATLAB and Simulink 3. Find Out What's New? 4. See What Industry Experts Are Doing? 5. Explore MATLAB and Simulink in Academia. @GiftetInc and the MathWorks have build a great relationship through the Springer book program.*

*October 18, 2012, Dr. @ilirprogri, @GiftetInc Char123main, CEO, and President attended a MATLAB seminar on Developing Measurement and Analysis Systems 2012 Joint Seminar MATLAB at Westford, MA - Westford Regency Inn & Conference Center 219 Littleton Road Westford, MA from 8:30 AM to 12:00 PM. The seminar was well attended by seventy four professionals. This seminar was also announced by the @IEEEOrg @ComSoc chapter of the @IEEEorg WCS Section. This seminar was a joint effort of the MathWorks and Agilent Technologies and thus it included two well rounded presentations: one from the MathWorks and another from the Agilent Technologies. The MathWorks presentation focused on new features of the latest release of the MATLAB 2012b. The Agilent Technology movements focused on how to interaction between Agilent signal analyzers and MATLAB.*

*March 29, 2012, Dr. @ilirprogri's, @GiftetInc Chairman, CEO, and President, attended a fabulous seminar on Implementing Measurement and Analysis Techniques using MATLAB at the MathWorks Headquarters, 3 Apple Hill Drive Natick, MA 01760. This was an outstanding opportunity to interact with the MathWorks technical and sales rep. and Tektronix technical staff. After this seminar @GiftetInc twitted Giftet Inc "@MATLAB thank you for the seminar and the demo from @tektronix at Natick. Looking forward to expanding our collaboration. via @GiftetInc.*

*February 7, 2012, Dr. @ilirprogri, @GiftetInc President and CEO attended a fabulous seminar from the MathWorks @MATLAB at 9:00 AM - 12:30 PM, Boston Marriott Newton. This was an outstanding opportunity to learn about how to make GUI MATLAB software and learn about various 3-D plotting techniques and MATLAB interface with Excel.*

*September 28, 2010, Dr. Progri, Giftet Inc. President and CEO, attended the first MathWorks MATLAB Virtual Conference from 11:00 EST until 4:00 EST. This conference is supposed to bring together major clients from the Government, Industry, Non-profit Organizations, and Academia from around the World.*

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