SOFTWARE ENGINEER

Highlights

- GPS Equipment
- GPS driver development for RTK systems. Brands familiar with NavCom, Septentrio, Javad, Topcon, Trimble, Spectra Precision(Ashtech), NMEA GPS.
- Bluetooth communication
- UHF radio communication
- NTRIP(Network Transport of RTCM data over IP)
- NavCom Starfire and Starfire Over IP
- NMEA 0183
- Geographic Information Systems
- Coordinate Projection Conversion
- Image georeferencing
- Photo capture
- KML Import/Export
- AutoCAD and Intellicad
- Projection conversion
- Aerial Image placement
- Programming Languages and Environments
- C/C++, Java, AutoLISP
- Windows CE, Windows Mobile, Android

Experience
March 2006
to
September 2015
Infoblox Inc. Tacoma , WA Software Engineer

- SurvCE is the bestselling survey field collection software with worldwide distribution.
- SurvCE is available for Windows Mobile and Windows Tablet platforms.
- Drivers GPS Driver development for NavCom, Hemisphere GNSS, Septentrio (Altus), Spectra Precision (Ashtech), Javad, DataGrid, Novatel, HiTarget, TopCon and Trimble.
- Bluetooth Driver development for HiTarget and Ashtech equipment.
- UHF radio drivers for Pacific Crest, ArWestCom, Satel, and MicroHard.
- Cellular modem drivers.
- Windows Mobile Camera driver.
- Features Seamless display of background image maps.
- Photo capture for points Windows Mobile devices.
- NGS Datasheet download.
- Advanced GPS average with statistical report.
- Automated GPS calibration report.
- GPS Localization report.
- GeoPDF export.
- KML Export, lines, points and photographs.
- Other responsibilities Maintain the coordinate projection library.
- Geographic (GIM), Electronic Sheep 2010-2015.
- Android program.
- GPS/GIS field software.
- Program features: GPS satellite Monitoring and Accuracy report.
- Coordinate support for most countries.
- Used Proj4 library.
- Store Map points with photograph.
- Import and Export KML and GPSX format.
- Google map display.
- Position sharing.
- Street view stored positions.
- Area and perimeter calculation with map display and report generation.
- Programing Accomplishments Continued GPSxCAD Extension for AutoCAD (Gecko Software 2005).
- Designed and developed this GPS extension for AutoCAD.
- Program was written in AutoDesk ObjectARX, a C++ API for AutoCAD.
- Program interfaced AutoCAD with handheld NMEA GPS.
- Program features: Field Survey with stakeout Map Navigation (Audio) Area and perimeter calculation *GPS satellite Monitoring Auto-by-Interval storage Elevation correction from DEM GPSXtented for Pocket PC (Gecko Software 2003).
- A GPS field survey and data collection application for Pocket PC.

- The program interfaced a NMEA GPS through a Bluetooth or serial connection.
- Program features: Seamless display of a unlimited map images.
- Point Editor to manage point names, symbols and display Support for UTM, State plane coordinates in NAD83 and NAD27. *GPS satellite Monitoring Point averaging for increased location accuracy.
- AutoCAD DXF input and output RealTopo Topographic Maps for AutoCAD (Gecko Software 1997).
- Georeferencing map program for AutoCAD.
- The program allowed the user to reproject the image map into one of several projections.
- The program trimmed the collars of the maps to seamlessly join multiple maps.
- The AutoCAD interface and clipping module was written in AutoLISP.
- The reprojection calculation and projection file was written in C++.
- LandGrab USGS File Conversion Package (Gecko Software 1995).
- Program converting USGS Digital Line Graphs (DLG), Digital Elevation Model(DEM), Geographic Names Information System(GNIS) files to AutoCAD DXF format.
- The program had geographic conversion to state plane, UTM and Latitude/Longitude.
- This program was written in C++.

January 2006
to
January 2015
Infoblox Inc. Seattle , WA Software Engineer

- SurvCE is the bestselling survey field collection software with worldwide distribution.
- Wrote and maintained GPS drivers for our manufacturer partners.
- Preformed product maintenance and testing.
- Designed and implemented product features.
- Improved and modernized the user interface.

January 1995
to
January 2007
Gecko Software Mapping Solutions City , STATE Company President and Founder

- Tucson Az.
- Company president and manager.
- Founded Gecko Software Mapping Solutions in 1995 to market and distribute AutoCAD mapping tools and data.
- Provided map data and software to the AutoCAD-GIS community.
- Software engineer designed new programs and data products.
- Conducted software advertising with print, mail and web-based marketing.
- Developed a strong customer base with clients in engineering, utilities, mining, resource exploration and environmental.

January 1990
to
January 1997
SWCA, Inc. Environmental Consultants City , STATE Project Manager and GIS Manager

- Managed projects for environmental permitting and mitigation.
- Manage projects that involved large GIS components.
- Trained staff on conducting GPS survey and post processing.

Education
1990
University of Arizona City , State , USA Masters of Landscape Architecture : Landscape Architecture
1986
Mesa State University City , State , USA Bachelor of Science : Biology Computer Science

Biology Computer Science

Skills

Photo, advertising, API, Audio, AutoCAD, AutoLISP, C, C++, Geographic Coordinate Conversion, Data Collection, Drivers, Editor, Features, GIS, GPS, Graphs, Image, Java, modem, Navigation, Network, permitting, Camera, Programming, radio, Software Engineer, UHF, user interface, utilities, view, Windows CE, written