

WILLIAM "KIRK" KUYKENDALL

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SUMMARY

Based in San Antonio, Texas, Kirk has over fifteen years experience in analysis, design, and programming of GIS applications based on ESRI software. Skills include network traversal algorithms for transportation, water resources as well as GIS integration with customer billing.

- * network tracing algorithms
- * linear referencing systems (LRS)
- * customer billing integration
- * .NET application design

TECHNICAL SUMMARY

SOFTWARE ArcGIS 9.x, ArcObjects, ArcEngine, ArcGIS Server
LANGUAGES C#, ASP.NET, VB6, VBA, UML, IDL, C++
OPERATING SYSTEMS Windows XP, 2000, NT, Digital UNIX, Solaris

PROFESSIONAL EXPERIENCE

AmberGIS, San Antonio, TX
President/Sole Proprietor

2001-present

Designed and programmed GIS capabilities for vehicle tracking system used by NATO ISAF in Afghanistan (2007).

Integrated UAV control software with ESRI technology to provide realtime UAV mapping. (2007)

Provided ArcSDE migration tools and consultation for San Antonio Water System. (2007)

Ported high frequency TDOA activeX control for Southwest Research Institute from MapObjects to ArcObjects. (Weathervane project, 2006).

Enhanced DF Net Control application for Southwest Research Institute to integrate ionospheric soundings for range estimation (Coolspot project, 2006).

Programmed GIS tools to integrate customer billing database with GIS for a rural electric cooperative. (2005)

Designed and programmed real-time map based user interface for Direction Finding Network Control system (DFNC) for Hyperion and ICE projects at Southwest Research Institute (2004).

Provided as needed ArcObjects support in development of map-based user interface to high frequency radio propagation model Southwest Research Institute Sigest project. (2004).

Designed a black-box application framework for ArcEngine and programmed an "ArcMap Lite" application using the framework. Developed extensions that work with both ArcMap Lite as well as ArcMap. (2004)

Wrote tools to assist in migrating two small electric utilities from personal geodatabase to ArcSDE. (2003)

Developed ArcSDE (SQL Server) ClassExtension, including custom object inspector, for municipal GIS site.

Founded startup company to provide GIS programming services, specializing in ArcObjects (July 2001).

Developed routines to extract ArcFM geodatabase datasets into proprietary format used by field based GIS at an electric utility. (2002)

Migrated tools from AML to ArcMap Extensions for electric utility.

Wrote application for USDOE to determine percentage of US oil reserves under federal land.

Developed and delivered "Programming ArcObjects with VB", a five day course.

Developed routines to migrate data from ArcInfo 7.2 coverages into ArcGIS 8.1 geodatabases using VB.

Developed batch procedures to synchronize billing customer database with GIS enabling the Outage Management System to access recent data.

SchlumbergerSema, Greenwood Village, CO

2000-2001

Senior Consultant

Developed VB based ArcMap 8.1 extension to set flow direction by phase in custom feature based electric distribution geometric networks.

GIS/Trans Ltd., Austin, TX

2000

Senior Consultant

Redesigned AML based network analysis modules for FHWA Highway Safety Information System to work with Avenue code, thereby reducing licensing costs by 70%.

Designed & developed linear referencing system (LRS) to integrate GPS roadway inventory with HPMS mile marker based legacy database, reducing costs associated with producing annual federal reports

Envision Utility Software Corp., Santa Fe, NM **1994-2000**
Senior GIS Programmer/Analyst

Wrote and maintained ArcInfo based applications containing over 40,000 lines of code that were in use at 7 different electric cooperatives, allowing non-technical staff to perform sophisticated GIS operations including integration of GIS with customer billing system.

Danish Hydraulic Institute, Dhaka, Bangladesh **1992-1993**
Senior GIS Analyst

Trained nationals to develop and maintain GIS applications for flood forecasting and analysis. Wrote tools to integrate MIKE11 with ArcInfo TINs, Grids and coverages.

Berger & Company, Houston, Texas **1991-1992**
Senior GIS Consultant

Managed off-site GIS projects being conducted for major oil exploration companies.

ESRI, Redlands, CA **1988-1991**
Consultant 1990-1991
Programmer 1988-1990

De Leuw Cather (Parsons Corporation), Dallas, Texas **1986-1988**
Transportation Planner 1990-1991
Planning Technician 1988-1990

AWARDS

ESRI Discussion Forum 2002 MVP Grand Champion
ESRI Discussion Forum 2003 MVP
ESRI Discussion Forum 2004 MVP Honorable Mention

EDUCATION

BS, Geography, Texas A&M University, College Station
University of Texas at Arlington, City & Regional Planning

PROFESSIONAL DEVELOPMENT

Managing Editing Workflows in a Multiuser Geodatabase, ESRI 2007
Developing Applications with ArcGIS Server .NET, ESRI 2005
GeoDatabase Design with Visio, ESRI 2001
Requirements Management with Use Cases, Rational University 2001
Advanced Object Oriented Design, UT Software Quality Institute 2000

