

Francis (Frank) Davenport IV

EDUCATION

M.A. Geography, UC-Santa Barbara, in progress, expected completion date Spring 2008

B.A. Culture, Geography, and Ecology with an Emphasis on Latin America, University of Redlands, Redlands CA, 2002

Languages: Highly proficient in Spanish

HONORS AND AWARDS

2004 ESRI International Users Conference: *First Place- Best VBA Application for ArcGIS*

PROFFESIONAL AND RESEARCH EXPERIENCE

December 2005-June 2006: GIS Consultant, University Space Research Association (USRA), SERVIR Program, City of Knowledge, Panama

Worked with and managed a multinational team to implement and maintain the NASA-USAID funded System for Regional Visualization and Monitoring (SERVIR in Spanish). Responsibilities included managing the design, testing, and implementing of real-time satellite image 3D-vizualiation applications using NASA WorldWind technology, managing the implementation of ESRI Portal Toolkit technology for Mesoamerica, re-designing and drafting text for the SERVIR website, managing support activities with SERVIR research partners (including 3 NASA laboratories 4 separate University research groups), and coordinating the role of SERVIR within the regional disaster management working groups and agencies.

September 2002 to September 2005: GIS Research Analyst, Redlands Institute for Environmental Design, Management, and Policy, University of Redlands

Consultant, Abu Dhabi Global Environmental Data Initiative (AGEDI)

Worked in Abu Dhabi, UAE with a multi-national team of GIS professionals and research biologists to design and implement a plan to build a clearing house of global environmental data within the Abu Dhabi Environmental Research and Wildlife Development Agency (ERWDA). Designed a data framework for the AGEDI program including specifications for data topics, structure, integration, and application requirements. Facilitated 10 workshops with representatives from multiple local, emirate, and national agencies to frame stakeholder views regarding eight different environmental sectors.

Team Leader, Desert Tortoise Project, Desert Tortoise Translocation Analysis

Worked with a multi-agency team to model desert tortoise habitat and implement a decision support system (see below) for identifying desert tortoise translocation sites. Responsibilities included working with domain experts and managers to define the parameters for the model and decision support system, data prepration, spatial analysis using ArcInfo 9.0 and EMDS, and facilitating a series of decision scenario workshops with desert tortoise scientists and land managers.

Team Leader, Desert Tortoise Project, Team Decision Support

Worked with other team members in coordinating project planning, research, outreach, and technical implementation of the Decision Support component of the DTP. Specific tasks include: Research and design of collaborative model building tools and methods; coordinating and managing collaborative model building workshops; habitat model construction and maintenance using Net Weaver 16.01; research, design, and implementation of various spatial habitat modeling techniques using the EMDS (Ecosystem Management and Decision Support) software suite; research and design of decision modeling tools and techniques using Criterium Decision Plus 3.0.3.; General outreach and collaboration efforts with the EMDS developers and users.

Project Manager, First 5 Children and Families Commission GIS Support

Managed and assisted in the production of 120 unique maps depicting socio-economic indicators for child development, ages 0-5, in San Bernardino County. General tasks include project planning, coordination, and management of a \$60,000 operating budget. Specific tasks focused on data inventory and assessment, communicating client needs to technical staff, and coordinating data acquisition from a diverse group of public, private, and academic providers.

Project Manager, Colorado River Basin Regional Water Quality Control Board GIS Initiative

Developed and implemented a GIS development plan for a California Regional Water Quality control board. Specific tasks include: conducting interviews; writing a Needs Assessment and Requirements Analysis; designing and presenting GIS technology orientation seminars; data inventory and assessment,, geodatabase design and

implementation, information products design, and specifying functional requirements for application development. Developed design specifications for and managed the development of a custom ArcGIS desktop extension (AGDAT). AGDAT received recognition for best VBA Application at the ESRI 2004 International Users Conference. General tasks include project planning and managing a \$120,000 operating budget.

Design Technician, Opportunity Proposal Pipeline Database, Redlands Institute, University of Redlands

Worked on a team to research, design, and implement a Microsoft Access database for the purpose of tracking and linking grant proposals and research opportunities with Redlands Institute staff, faculty members, and outside researchers.

February 2000-October 2001: GIS Technician/Intern, Salton Sea Database Program, University of Redlands

Data Analysis and Cartographic Production for Salton Sea Atlas

Performed spatial data acquisition, analysis, and processing using ArcGIS 8.1 and ArcInfo 7.1. Cartographic production included designing and editing layouts, symbology, and labeling for various sections of the Atlas.

USGS Bird Banding Project

Performed data mining, data compilation, quality control, spatial analysis, and cartographic production of USGS legacy data using ArcGIS 8.1 and ArcInfo 7.1 for publication by a member of the Salton Sea Science Committee.

Salton Sea Atlas Primer

Researched conceptual layout design and content for Hard copy Salton Sea Atlas. Wrote text and produced graphics (using AdobePageMaker 6.5) for Atlas Primer, a pilot version of Salton Sea Atlas.

San Bernardino Digital Vegetation Mapping

Performed data automation, advanced editing, and quality control using ArcInfo 7.1 and ArcView 3.1 for US Forest Service vegetation data.

Palm Oasis Coverage

Performed spatial data acquisition, compilation, quality control and cartographic production using ArcView 3.1 in support of SSDP and Palm Springs Desert Museum

INTERNATIONAL EXPERIENCE

Lived, worked, and/or traveled in South Korea, Greece, Egypt, Ecuador, Chile, Holland, Turkey, United Arab Emirates, Oman, Spain, Honduras, and Panama.

PUBLICATIONS AND PROFESSIONAL PRESENTATIONS

'Spatial Decision Support for Translocating Threatened Species' Presentation at the 2005 ESRI International Users Conference in San Diego, CA July 2005

'Using Custom Tools to Analyze Agricultural Management Practices' Presentation at the 2004 ESRI International Users Conference, San Diego, CA, August 2004

'Management of Desert Tortoises and their habitat on Public Lands using Ecosystem Management Decision Support' Poster presentation at the Ecological Society of America (ESA) Annual Conference, Portland, OR, August 2004

'Strategic GIS Implementation Planning for the Colorado River Basin Regional Water Quality Control Board' Presentation at American Water Resources Association Annual Conference, San Diego, CA, November 2003

'Ecosystem Management and Decision Support in the Western Mojave' Presentation at 2003 ESRI International Users Conference, San Diego, CA, July 2003

SOFTWARE SKILLS

Proficient in: Arc View 3.2 Arc Info 7.1.2; 8.3; 9.1,2, Spatial Analyst, Geostatistical Analyst, ArcHydro, EMDS 3.0, NetWeaver 16.1, Matlab 7.2, Lingo 10, Criterium Decision Plus 3, Microsoft Office Suite including: Excel, Word, PowerPoint, Outlook, Project, Microsoft Visio Professional 2003 (including Geodatabase Design using CASE Tools), Adobe Illustrator 9.0, Adobe PageMaker 6.5, Adobe Photoshop