

# J. Christopher Jennings

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## CAREER HIGHLIGHTS

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- ◆ Master's degree in Environmental Science with 9 years of professional experience.
- ◆ Expert in GIS, web and database development.
- ◆ Developed the first GIS Strategic Plan and enterprise database for the leading water research agency in Illinois.
- ◆ Led the development of a unique, web-based environmental decision support system for Illinois watersheds.
- ◆ Piloted the use of GIS and GPS technology in watershed management projects in Iowa.

## TECHNICAL SUMMARY

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|-----------------|---|
| GIS:            | ArcGIS 9.x, ArcView 3.x, ArcIMS 9, Spatial / 3-D Analyst Extensions, ArcSDE, GPS technology |
| Web/Internet:   | XHTML, XML, SVG, CSS, ASP/ASP.NET, IIS 5/6, Ruby on Rails                                   |
| Databases:      | SQL Server 2000, Access, MySQL  |
| Graphic Design: | Adobe: Photoshop, Illustrator   |
| Languages:      | Visual Basic.NET, Javascript, Ruby, Python  |
| Other Software: | Microsoft Office, Visual Studio.NET   |
| Platforms:      | Windows clients, Windows 2000/2003 Server, Unix   |

## PROFESSIONAL EXPERIENCE

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### GIS Analyst/Programmer 4, Patrick Engineering, Inc., Chicago, Illinois

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- 7/2006-Pres.** Build web and GIS applications for the GIS Division
- ◆ Developed a web-based address management system for Village of Plainfield, Illinois (ASP.NET and ArcIMS technologies).
  - ◆ Developed a web-based query and reporting system for McHenry County, Illinois, Department of Transportation (ASP.NET, ArcIMS).

### GIS Manager, Illinois State Water Survey, Champaign, Illinois

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- 1/2005-7/2006** Manage the daily GIS Section activities for the Illinois State Water Survey (ISWS).
- ◆ Support over 60 Water Survey scientists with GIS-related applications, including ArcGIS 9.x model building and scripting, ArcIMS development, and general data requests.
  - ◆ Supervise GIS Specialist in completing data/service requests and managing GIS resources.
  - ◆ Manage the technical development of the Illinois Rivers Decision Support System.
  - ◆ Manage two GIS servers running Windows Server 2003, SQL Server 2000 and ArcSDE.
  - ◆ Accomplishments to date:
    - Created ISWS GIS Strategic Plan, Needs Assessment, and related planning documentation.
    - Devised and implemented an enterprise ArcSDE solution for ISWS GIS datasets, and storage strategy for legacy data formats.
    - Deployed Metadata Search tool for searching ISWS GIS metadata.

Continued...

- Produced over a dozen ArcIMS applications to support ISWS projects.
- Designed and implemented a GIS Intranet for ISWS staff. The site includes a database-driven knowledgebase for sharing information.
- Initiated GIS Seminar series for ISWS staff to share their experiences with GIS technology.
- Assisted in the team development of a general ISWS metadata standard and web interface for all Water Survey data resources (utilizing XML, SQL Server 2000, web services, and ArcIMS).

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### Freelance Web Developer

**2003-Pres.** Design standards-based web sites for a variety of clients utilizing XHTML, CSS, XML, databases and programming languages. My online portfolio can be viewed at: [spatialbytes.com/portfolio/](http://spatialbytes.com/portfolio/).

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### Assistant Professional Scientist, Illinois State Water Survey, Champaign, Illinois

- 1/2001-12/2004**
- Led the team development of the web-based Illinois Rivers Decision Support System (ILRDSS) for watershed management in the Illinois River Basin.
  - ◆ Designed and currently maintain several key applications:
    - ILRDSS web site (<http://ilrdss.sws.uiuc.edu>). Provides centralized access to data and information related to watershed restoration. Coded with XHTML, XML, CSS, and ASP. Web site session traffic increased 224% from 2001 through 2004.
    - SQL Server 2000 database and ASP.NET application to manage ILRDSS content.
    - ArcIMS web mapping applications to support ILRDSS and Water Survey missions.
    - XML-based data retrieval and graphing applications for the Center for Watershed Science (CWS).
    - Databases and web applications for water quality research, sediment research, hydrologic and hydraulic modeling.
  - ◆ Provided GIS support and application development to the CWS using ArcGIS 9.x, Spatial / 3-D Analyst Extensions.
  - ◆ Developed web/database application for storing and retrieving digital photographs from projects in the CWS.
  - ◆ Communicated project results through public speaking events, conferences and poster displays.

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### Environmental Specialist, Iowa Department of Agriculture & Land Stewardship, Ida Grove, Iowa

- 1997-2001**
- ◆ Coordinated a water quality project designed to prevent pollution from agricultural and urban nonpoint sources.
  - ◆ Piloted the use of GIS and GPS technology in watershed management projects in Iowa.
  - ◆ Educated children and adults about water quality, conservation, and pollution prevention.

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### Forestry Technician, Champaign County Forest Preserve District, Mahomet, Illinois

- 1996-7**
- ◆ Implemented the District's natural resources management plan, including prairie restoration, tree relocation and planting, and controlled burns.

## EDUCATION

M.S., Environmental Science, INDIANA UNIVERSITY, Bloomington, Indiana, 1996  
B.A., Environmental Biology, TAYLOR UNIVERSITY, Upland, Indiana, 1994

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*Professional Experience (page 3)*

## **DEVELOPMENT**

ESRI Certified Training – ArcIMS (April, 2002)

ESRI Certified Training – ArcGIS 9 Spatial Analyst (January, 2005)

CS125, Introduction to Computer Science, University of Illinois at Urbana-Champaign  
(Summer, 2003 – Java language)

## **PROFESSIONAL AFFILIATIONS**

Member, Illinois Geographic Information Systems Association, 2002-Present

Member, Iowa Geographic Information Council, 1998-2001