

## Software Development

**Expertise** Engineering Software Development (Visual C++, CodeWarrior C++, XCode, wxWidgets, STL, XML, Wiki, MFC, Rich Edit Control, MARC records)

**Education** WorkKeys National Career Readiness Certificate (NCRC) Gold Certified, June 2010  
B.S. (Computer Science & Physics), 1985  
Winona State University, Winona, Minnesota

### *Professional Experience*

2010 - Present *Itasca Consulting Group, Inc., Minneapolis, Minnesota*  
*Software Engineer*

2002 - 2009 *DNASTAR, Inc., Madison, Wisconsin*  
*Senior Software Engineer*

2000 - 2002 *Sagebrush Corporation, Onalaska, Wisconsin*  
*Senior Software Analyst*

1987- 2000 *Winnebago Software Company, Caledonia, Minnesota*  
*Software Developer*

### *Project Experience*

*Software Development:* Created GUIs and back-end code for handling large amounts of biological data for protein and DNA sequence analysis. Implemented GUIs for primer sequences and for displaying the results of sequence assembly projects. Designed and coded new ways to compare genes and proteins visually (MegAlign and SeqBuilder exported to GenVision).

Participated in the full cycle of development for library automation software: creating requirement documents, detailed design specifications, test plans and user documentation. Led development of award-winning, cross-platform library software (Spectrum CIRC/CAT) over 800,000 lines of source code in size (Visual C++, MFC, Windows, Mac).