

Qualifications I'm an experienced, well-rounded IT professional looking for a challenging new BI and database developer role.

Education and Training B.A., Computer Science — Indiana University, Bloomington, IN; 1998.
Microsoft training — .NET Development, SQL Server, Data Warehousing; 2003-2013.
Udacity training — Android Development, Git; 2015.
Conferences — SQL PASS Summit, Google I/O; 2016-2017.

Certifications Microsoft Certified Professional (MCP)

Technical Skills High level of proficiency in a wide range of technologies, including the following.

Programming Languages:

C#, C++, Objective-C; Visual Basic; SQL (queries, views, stored procedures, functions); PHP; Java; Dart; Python; HTML, CSS, Bootstrap, JavaScript; VBScript, Unix shells, PowerShell

Frameworks and Services:

.NET, ASP.NET, MVC, Entity Framework; REST and SOAP web services; XML, JSON; jQuery; Flutter

Development Tools:

Visual Studio, XCode, Android Studio; TFS, SourceSafe, Git; regular expressions; Adobe Photoshop

Database Development and Administration:

Microsoft SQL Server, SQL Server Reporting Services (SSRS), SQL Server Integration Services (SSIS); Sybase ASE; MySQL

Open Source Projects Developer of “Cuppa” tea timer apps for macOS, iOS, and Android (github.com/ncosgray)

Professional Experience **Analyst/Developer** **The Seattle Public Library**
November 2015 - Present Seattle, WA

- Design and implement library data warehouse
 - Work with stakeholders to determine data and reporting needs
 - Work with data owners to identify sources and understand contexts
 - Build ETL processes using SSIS, C#, and PowerShell
 - Develop efficient and performant database indexes, views, and stored procedures
 - Build enterprise reports and KPIs using SSRS
 - Work with business analysts to expose data to Tableau and Excel
 - Build dashboards for ETL process monitoring and data verification
- Web developer for internal and external web applications and web services
 - ASP.NET (VB) online payments application maintenance
 - ASP.NET (C#, MVC, Entity Framework, Bootstrap) volunteer data entry tool
- Participate in management and support of Integrated Library System (ILS)
 - Maintain SirsiDynix Horizon, database, and connected services such as SIP2
- Accomplishments:
 - Built over 20 end-to-end ETL processes and over 50 SSRS reports in two years
 - Grew data warehouse from 0 to 200GB (200+ million rows) in two years
 - Published and continually refreshed 4 datasets for Seattle Open Data Initiative
 - Managed and tested migration of Horizon ILS from Sybase to SQL Server

**Professional
Experience,**
continued

Analyst/Developer
May 2014 - November 2015

IT Services - Amalga Data Warehouse
UW Medicine, Seattle, WA

- SQL developer for CIP V3 entity data pipeline
 - Loaded datasets from many sources and combine into V3 system format
 - Designed and implemented data pipeline, error handling, and logging
 - Architected custom SSIS package, stored procedures, and table structures
 - Wrote documentation, trained team members on custom pipeline processes
- Authored reports using SQL, SSRS and SSIS, and the Amalga system
 - Primary developer for institutional metrics dashboards (“Patients Are First”)
 - Presented new reports and visualizations to UWM leadership
 - Built reports (scheduled and on-demand) per requirements of UWM end users
- Accomplishments
 - Wrote modular stored procedures for reuse by many data pipeline data sources
 - Devised method to improve data pipeline by loading only when updates detected
 - Wrote C# data comparison application for use during system migration
 - Created dozens of charts and reports, helping increase quality of patient care

Senior Systems Analyst
June 2008 - May 2014

The Seattle Public Library
Seattle, WA

- Managed and supported Integrated Library System (ILS)
 - SirsiDynix Horizon ILS with SIP2-based TechLogic ACS self-checkout
 - Worked with staff, librarians, and vendors to troubleshoot and solve ILS issues
 - Created reports using SQL, VBScript, and Excel
 - Planned and implemented software/hardware upgrades and migrations
- ASP.NET web application and web service developer
 - Primary developer of PayPal-based online fine/fee payment system
 - Wrote 3M/SirsiDynix SIP2 API library for .NET applications
 - Built a suite of .NET web services for retrieving data from library systems
 - Developed web tool used by librarians to track reference questions
- Database administrator for Sybase, SQL Server, Access, and MySQL databases
- Accomplishments
 - Enabled library patrons to pay fines online, totalling over \$50,000 per month
 - Automated over 100 scheduled reports saving staff thousands of hours of time
 - Created ILS database mirroring scheme for backup, testing, and training

Senior Computer Specialist **Center for Studies in Demography and Ecology**
June 2003 - May 2008 University of Washington, Seattle, WA

- Maintained 1,000-user Active Directory domain and 15 terminal servers
- Participated in Unix infrastructure support, including Apache and MySQL
- Assisted with supervision of student workers
- Web programming projects in PHP and Perl
 - Account request forms and backend request queue management system
 - Workshop registration form with roster/attendance tools
 - Data extraction tool for sharing specialized research dataset

System and Database Administrator
March 2000 - May 2003

Department of Medical Genetics
Indiana University, Indianapolis, IN

- Maintained Solaris servers, NIS+ namespace, statistical/genetic analysis software
- Developed MS Access databases with forms-based front ends
- Leading role in data management for variety of genetic research projects

Web Programmer
January 1999 - February 2000

Hirons & Company Advertising, Inc.
Bloomington, IN

- Worked with designers, copywriters and account managers to create websites
- HTML markup, JavaScript, CGI scripting in Perl, and extensive Photoshop work
- Lead programmer for large, custom-built e-commerce website