

# CHRYSTAL SANDER

## PROFESSIONAL SUMMARY

Software engineer for web, data-driven, back-end, database, and cross-platform application development. Business expertise across multiple industries with specialties in healthcare, finance, and product development.

## CURRENT TECHNICAL EXPERTISE

**Core Skills:** C#, NET CORE, ASP.NET, SQL, API, Microservices and SOA architectures

**Approaches:** Agile, Iterative, Test-Driven, Continuous Delivery (Azure DevOps, Jenkins), Waterfall

**Data:** Relational, Cloud, Object Storage, XML, JSON, SQL Server, Oracle

## PROFESSIONAL EXPERIENCE

11/2021 • *ApexTech Enterprises, LLC* • *Software Developer*

- Provide technical services and support to small businesses and individuals for the following: website development and maintenance using multiple technologies: C#, .NET CORE, MVC, CSS, ASP.NET, PHP, JavaScript and content management systems
- Website development and maintenance
- Cybersecurity analysis, identify web vulnerabilities and provide mitigation remedies
- Database development, maintenance, mining, and business intelligence reporting
- Social media development and marketing (SEO)

12/2013 – 10/2021 • *Mastercard International* • *Senior Software Engineer*

- Utilized software development technologies to provide secure payment processing solutions for ISOs, financial institutions, and merchants.
- Created unit tests, coding, tracing, and debugging using Test Driven Development. Automated acceptance tests verifying functionality of stories that were implemented via Azure DevOps.
- Managed front-end development utilizing Typescript with React and Redux.
- Evolved the management of data processes and publishing using in-house bulk copy programs, Active Batch, ETL, Compression & Extraction technologies in CI/CD systems utilizing Jenkins and Azure DevOps.
- Technical lead for the development of a distributed object storage server housing unstructured data such as photos, videos, log files, backups, and containers hosted in private cloud infrastructures based on S3 storage functionality. Bulk file transfer using API, MinIO, batch processing
- Provided research, development, and performance matrices for multiple proof-of-concepts.
- Created internal and web API services and performed migrations from Open API to XML Gateway, TLS migrations

- Wrote and maintained both front-end and back-end location systems hosting international location data and geocoding.
- Worked on various business development activities across the SDLC utilizing JIRA and Git
- Security testing of REST and SOAP APIs
- Performed vulnerability testing, application security, and database security against web services and applications.
- Identification and mitigation of injection, business logic, authentication, session management in applications

*05/2010 – 12/2013 • Charter Communications • Software Developer II*

- Created, maintained, and monitored web services utilizing XML, SOAP, and WCF via C# on both SQL server and Oracle systems.
- Participated in iteration planning meetings where task estimation, work breakdown and assignment of responsibilities were interactively developed.

*09/2006 – 12/2009 • Independent Software Developer Contractor*

- Used Microsoft Synchronization Framework, .NET, and SharePoint to develop event management and emergency response software solutions for Microsoft, the Bill & Melinda Gates Foundation, and nation-wide events

*08/2001 – 09/2006 • Mercy Health Systems • Programmer / Analyst*

- Gained extensive database design programming experience creating SQL functions and stored procedures for reporting, analysis, ETL, data conversion utilizing SQL Server and Oracle in accordance with HIPAA, and other regulatory compliance committees

**OTHER TRAINING AND EXPERIENCE**

- Java, C, C++, JavaScript, Docker, containers, self-learning algorithms for AI / Machine learning, Python, Splunk, Linux, PHP, Service Bus with Message Queuing, PowerShell, IoT
- Cybersecurity Skills: Identify and mitigate application-level vulnerabilities such as SQL Injection, XSS, CSRF, authentication flaws, and poor cryptography. Experience with network security tools working with LAN and WAN topologies, internet protocols, penetration and brute force testing. OWASP adherence.
- Patent co-inventor for US010885054B2 – Tracking Metadata Changes in Multiple Data Stores and Generating Alerts for Detected Data Impacts
- Microsoft Certified: Azure Fundamentals
- Participation in Hack-A-Thons, Girls 4 Tech, Mentoring, Junior Achievement, TryHackMe

**EDUCATION**

- Application Development Certification - 2001 - Vatterott Professional Development
- Master Of Arts – 1997 - Webster University
- Bachelor Of Science - 1995 - Southeast Missouri State University