Cristopher D Benge

Professional Profile

Over twenty years of business intelligence, analytics, and data platforms architecture experience providing hands-on consultation and leadership in the Healthcare, Defense, and Federal Civilian sectors. I have a genuine passion for data science, machine learning, cloud architecture, and database solution-building - with a proven track-record leading and delivering successful engagements for some of the largest and most complex data problem areas.

Education

University of California, Berkeley – M.S., Information and Data Science **Indiana Wesleyan University** – B.S., Business Information Systems *Magna Cum Laude*

2021 (anticipated) 2012

Professional Certifications & Credentials

- Microsoft Professional Program: Data Science
- Microsoft Certified: Azure Data Scientist
- Microsoft Certified Master: SQL Server
- AWS Certified Solution Architect (AS)
- Microsoft Certified Solutions Expert: Data Platform
- Microsoft Professional Program: Artificial Intelligence
- Microsoft Certified: Azure Solution Architect Expert
- Microsoft Certified Solution Master: SQL Server
- Microsoft Certified Solution Expert: Data Management and Analytics

U.S. Security Clearance: Top Secret (Active)

Skills and Tools

- Microsoft Azure and Amazon AWS cloud platforms
- Proficient user of Python, R, .NET languages
- Machine learning / deep-learning on CNTK, LightGBM, PyTorch, Keras / TensorFlow, XGBoost, Catboost, Scikit
- Expert use of Microsoft SQL Server (full ecosystem)
- o Power BI, Tableau, Plotly, Seaborn, Matplotlib, ggplot
- o Databricks, Azure ML Service, Spark, Hadoop
- Research design, exploratory data analysis, data engineering, statistical inference, data visualization
- LaTeX, Jupyter, R Markdown, SQL

Honors and Awards

- 1st place: February 2019 World Bank Machine Learning Competition – Publication Classification (multi-label, NLP classification)
- 1st place: October 2017 Department of Education Machine Learning Competition – Predict Student Outcomes (regression)

Experience

Microsoft Indianapolis, Indiana

Area Solution Architect, U.S. Healthcare CTO

January 2019 – present

- Provide solution architecture and technical consultation on data science, machine learning, and business intelligence for Microsoft Healthcare customers in the U.S. commercial and federal civilian sectors
- Guide customers on their digital transformation both in the cloud and into machine learning on the Azure platform.
- Serve as an Al ambassador within Microsoft, educating our business leaders and sales executives on modern data science technologies and solutions.
- Responsible for qualifying, technical deal shaping, demonstrating business value, early-stage architecting, and building speculative solutions using emerging technologies.

United States Senate, Sergeant at Arms

Indianapolis, Indiana | Washington, D.C.

Principal Engineer and Team Lead, SQL Enterprise Data Services

June 2015 - January 2019

- Served as team lead for the SQL Server solutions area of the Enterprise Data Services section, responsible for all data and analytic needs of the U.S. Senate offices, committees, and applications.
- Created POC's and led the implementation of mission-critical architecture changes to ensure fully automated [geographic] disaster recovery, continuity of operations, and performance monitoring of all data assets.
- Led the research and development of experimental machine learning initiatives, particularly in the areas of IT operation predictive maintenance and automation of tasks.
- Provided hands-on, ground-up build of all EDS hardware asset installation, configuration, security hardening, performance monitoring, and troubleshooting [physical and virtual].
- Migrated and consolidated thousands of legacy SQL Server databases into a unified, geographically-replicated, standardized architecture.
- Implemented geographically-scaled analytics platforms (Power BI, SSRS) to all U.S. Senate offices and provided consultation on development, design, security, and performance needs.
- Responsible for team interviews, mentoring, career development, and employee coaching.

Microsoft

Stuttgart, Germany | Kuwait City, Kuwait | Other U.S. Locations

Senior Consultant II / Senior Premier Field Engineer (DoD EMEA)

August 2005 - June 2015

- Served as a SQL Server consultant and platforms expert for U.S. commercial and federal civilian Microsoft customers (2005-2014). Some example work is listed below:
 - Served as the architect and team lead for large-scale, Kimball-style data warehouse development supporting the CIO dashboard and drug-development pipeline project for a large pharmaceutical customer.
 - Developed custom SSIS pipeline components for the consumption of ClinicalTrials.gov web-service for integration into real-time clinical trial planning software.
 - Authored center-of-excellence enterprise standards for SQL Server development, data modeling, and implementation of all database engine and SQL Analysis Services assets at Fortune 500.
 - Designed and developed scalable database solution for National Health Information Network (NHIN) standard, leveraging custom-developed SSIS dataflow components with complex health data scoring and security rules.
- Served as a deployed Premier Field Engineer for the SQL Server platform in Europe and Kuwait for the U.S. Department of Defense, EMEA (2014-2015). Some example work is listed below:
 - Designed and developed SQL STIG compliance monitoring and alerting system via custom policy-based management, PowerShell scripts, and SQL Server Reporting Services.
 - Authored, implemented, and tested robust DR / COOP SQL Server strategy for a multi-European country coalition of U.S. Army data assets.
 - Designed a custom data warehouse and Power BI / SSAS / SSRS solution used to facilitate management of U.S. Army command telecommunication expenditures for all directorates and VIP's.

References and Additional Experience

Available upon request.