# Cristopher **Benge**

Principal Data Scientist 🤝 Engineering Manager

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## EDUCATION \_

# Columbia University in the City of New York

MASTER OF SCIENCE, COMPUTER SCIENCE (MACHINE LEARNING)

Ехр. 2023

New York, New York

Berkeley, California

#### University of California, Berkeley

Master of Information and Data Science

May 2021

Apr. 2012

#### Indiana Wesleyan University

BACHELOR OF SCIENCE, BUSINESS INFORMATION SYSTEMS

Apr. 2006

Marion, Indiana

Associate of Science, Business

## SKILLS \_\_\_

**Programming** Python, R, C#, JavaScript, PowerShell, LaTeX, Markdown

Machine Learning PyTorch, Keras/TensorFlow, LightGBM, XGBoost, Catboost, scikit, Azure ML, Spark MLlib

**Data Platforms** SQL Server, Analysis Services, Azure Synapse Analytics, Cosmos DB, Azure Data Lake, S3, Redshift

**Data Visualization** Power BI, Tableau, Plotly, ggplot, Seaborn, Matplotlib, Bokeh, Altair, D3.js

Cloud Platforms Microsoft Azure, Amazon AWS, Google GCP

Miscellaneous Research Design, Data Engineering, Data Warehousing, Statistics, Communication, Leadership

#### EXPERIENCE \_\_\_

Microsoft

Indianapolis, Indiana

PRINCIPAL DATA SCIENTIST MANAGER (AZURE CLOUD + AI)

Oct. 2020 - PRESENT

- · Manage a data science team for the Azure CHIE Executive Office, reporting directly to the Chief of Staff, focused on developing and improving quality of analytics and data-driven solutions to the worldwide hardware engineering organization.
- · Design of experiments, regression analysis, machine learning, data-product solution architecture, and storytelling with data to executive leadership to give insights into the business.
- · Lead special projects on behalf of the Azure CHIE Executive Office, managing extended virtual teams across the organization to deliver on creation of new data capabilities and analytic products within the worldwide hardware engineering organization.

## University of California, Berkeley

Berkeley, California

Graduate Teaching Assistant (Machine Learning Systems Engineering)

Jan. 2022 - PRESENT

· Serve as teaching assistant for the MIDS Spring 2022 semester, DATASCI W255: Machine Learning Systems Engineering.

SENIOR AREA SOLUTION ARCHITECT (OFFICE OF THE U.S. HEALTHCARE CTO)

Indianapolis, Indiana Jan. 2019 - Oct. 2020

- · Provided 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.
- Guided customers on their digital transformation both in the cloud and into machine learning on the Azure platform.
- Served as an AI ambassador within Microsoft, educating our business leaders and sales executives on modern data science technologies and
- · Qualification, technical deal shaping, demonstrating business value, early-stage architecting, and building speculative solutions using emerging technologies.

#### **United States Senate**

Washington, District of Columbia

Principal Systems Engineer (Office of the Sergeant at Arms and Doorkeeper)

Aug. 2015 - Jan. 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.
- · Implemented geographically-scaled analytics platforms to all U.S. Senate offices and provided consultation on development, design, security, and performance needs.

#### Microsoft

Stuttgart, Germany / Kuwait, Kuwait

SENIOR PREMIER FIELD ENGINEER (DEFENSE INDUSTRY, EMEA)

Aug. 2014 - Jul. 2015

- Provided engineering in the field for Microsoft SQL product team in support of the U.S. Army unified combatant commands in Germany and Kuwait
- Developed enterprise data warehousing and reporting solutions built to facilitate management of command telecommunications for all directorates.
- Planned and developed multi-site & multi-country continuity of operations solutions for military operations in Germany, Kuwait, and the
  United Kingdom. Performed root-cause analysis, remediation planning, knowledge transfer, and training of security compliance mechanisms.

Microsoft U.S. Various (Travel)

SENIOR CONSULTANT II (CONSULTING SERVICES, U.S. COMMERCIAL & PUBLIC SECTOR)

Aug. 2005 - Jul. 2014

- Provided consultation on database design, data warehousing, business intelligence, and data platforms architecture to U.S. commercial customers of Microsoft. The primary customer profile with commercial sector was Healthcare-focused, typically in the pharmaceutical or payor vertical.
- Transitioned to the U.S. Public Sector team in 2010, where focus shifted to designing data solutions for organizations and agencies within
  the U.S. Federal Civilian, Defense, and Intelligence community.

Alcoa Indianapolis, Indiana
Data Warehouse Developer (1099 Contract)

Jun. 2001 - Aug. 2007

Powerway.com Indianapolis, Indiana

Database Architect 2000 - 2001

American Health Network Indianapolis, Indiana

Database Developer 1999 - 2001

Anthem Blue Cross Blue Shield Indianapolis, Indiana

Systems Administrator 1996 - 1999

# HONORS & AWARDS \_\_\_\_

## Competition

2019	<b>1st Place,</b> Identifying World Bank Publication Topics (NLP, multi-label, multi-class, multi-language)	DrivenData
2018	Top 12%, Data Science Bowl - Find the Nuclei in Divergent Images (Vision, instance segmentation)	Kaggle
2017	13th Place, Predict Futures Sales for the 1C Company (Regression, time-series)	Kaggle
2017	1st Place, Department of Education - Predicting College Graduate Earnings (Regression)	DrivenData

#### **EMPLOYER**

2020	Circle of Excellence: Platinum Club, Microsoft's highest annual employee award for performance	Microsoft
2020	Champion Award (Q3), Microft's highest quarterly employee award for performance	$\it Microsoft$
2020	Hero Award, Microsoft's highest monthly employee award for performance	$\it Microsoft$
2019	#BetterTogether Award, Recognition for leading a diverse, high-performing v-team	Microsoft

## CERTIFICATIONS & CREDENTIALS \_

Clearance(s) U.S. Department of Defense, Top Secret (Active)

Amazon AWS Certified Solution Architect (AS)

Microsoft

Certified: Azure Data Scientist, Certified Azure Solution Architect (Expert), MPP: Data Science, MPP: Artificial Intelligence,

Certified Solutions Master: SQL Server (MCSM), Certified Master: SQL Server (MCM), more (see LinkedIn)

## PUBLICATIONS \_\_\_\_\_

#### BERTVision: A High-Performance Compression Approach for Most NLP Tasks

Overleaf

Graduate Research

Capstone, UC Berkeley

- Draft paper can be viewed here in Overleaf.
- GitHub repository & project page is open to everyone.