CHRISTOPHER A. SWENSON

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Creative Data Analyst and Evolving Data Scientist. A data analyst with experience in healthcare analytics, working with insurers, clinicians, researchers, marketers, and business intelligence vendors. Experienced with all aspects of data processing and analysis, including specification gathering and documentation.

- Data Transformation
- Diverse Data Types
- Automation
- Analytical Reporting
- Inferential Statistics
- Experimental Design
- Observational Data Analysis
- Predictive Modeling
- Machine Learning

TECHNICAL SKILLS

Languages:	SQL, T-SQL, SAS, R, Python, SPSS, Octave (MatLab), regular expressions
Reporting Tools:	Power BI, Excel (Power Pivot), Access, SAS, Crystal Reports, BusinessObjects Webi
Databases:	Microsoft Azure & SQL Server, Oracle, Greenplum (PostgreSQL), Netezza, Epic Clarity
Data Types:	Educational and medical research data, medical and pharmacy claims, medical billing, electronic medical / health records (EMR / EHR), website activity, call center activity
Techniques:	Experimental and quasi-experimental design, observational data analysis, inferential statistics, data transformation (ETL), predictive modeling (regressions, SIR), and machine learning, including neural networks, SVM, clustering, PCA, anomaly detection

PROFESSIONAL EXPERIENCE

Promega, Madison, WI **2021 to Present**
A biotechnology and molecular biology manufacturer.

Data Scientist 2 (2021 to present)
Advanced, full stack analytics.

SSM Health, Madison, WI **2017 to 2021**
An integrated healthcare organization including hospitals, clinics, and a health insurance company

Data Scientist (2020 to 2021)
Provided full stack analytics expertise, including data processing, statistical analysis, and reporting.

- Established COVID-19 risk models to assist with identifying at-risk patients for targeted treatments
- Developed COVID-19 admissions predictive models using SIR-based models to inform leadership response
- Spearheaded usage of Power BI with COVID-19 reports, including modeled and actual data

Senior Healthcare Analyst (2017 to 2020)
Developed statistical analyses to demonstrate effectiveness, describe disparities, and identify rising-risk patients.

- Demonstrated a statistically significant weight loss for surgical participants in the weight management program
- Identified several areas of equity concerns using logistic regression models
- Negotiated standardized statistical analyses between SSM Health and Dean Health Plan

Great Wolf Resorts, Madison, WI **2017**
Chain of hotels with indoor water parks.

Data Analyst Consultant
- Integrated and analyzed $13 million of credit card transactions with reservations

Health Data & Management Solutions, Chicago, IL (remote) **2014 to 2017**
Business intelligence platform and analytics vendor, subsidiary of Aetna.

Senior Lead Informatics Analyst
Managed and provided subject-matter expertise on several products in a business intelligence platform.

- Increased client satisfaction by developing insightful, dynamic analytical reports
- Reduced costs for clients by identifying low-value services
- Improved processing time and simplified data transformation process for large, external medical claims data sets

Healthgrades, Madison, WI **2012 to 2014**
Physician and hospital marketing, relationship management, and analytics vendor.

Data Scientist
Analyzed data for a variety of products, providing results to leadership, sales team, and clients.

- Improved client relations by increasing the accuracy of the market configuration tool
- Enhanced sales process by providing sales team with competitive analyses and projected ROIs
- Substantially increased credibility of ROI methodology by improving assumptions

UW Health, Madison, WI **2010 to 2012**
Local health system including a medical school, hospital and clinic organization, and a health insurance company.

Programmer Analyst, University of Wisconsin School of Medicine, Health Innovation Program
Provided subject-matter expertise on electronic health record. Combined disparate data sources into a unified model.

- Strengthened research results by increasing the accuracy of patient medical home assignment
- Propelled research on complex medical topics by providing accurate, timely data sets to researchers
- Reduced the complexity of a research data model by focusing on patients and automating processing

Clinical Data Analyst, University of Wisconsin Medical Foundation
Analyzed medical record data for quality measurement purposes. Gathered specifications for clinical analyses.

- Improved the accuracy of pay-for-performance reporting through automation
- Salvaged historical quality measure data for data warehousing and reporting
- Increased communication among analysts by establishing a user group

PRIOR EXPERIENCE

Health Care Analyst II, Dean Health Plan, Madison, WI (2008 to 2010)
Developed complex algorithms for various purposes, including analyzing trends in healthcare claims data and identifying patients with various diseases for care management. Managed HEDIS data ETL project and analyses.

Researcher, Renaissance Learning, Madison, WI (2005 to 2008)
Conducted experimental and quasi-experimental research on product use and student achievement. Demonstrated product impact on student achievement with statistical analyses. Communicated research outcomes to teachers.

EDUCATION

Master of Applied Statistics (2020, expected completion in 2024)
B.S. Psychology and Music with Honors, University of Wisconsin-Whitewater (2005)

PUBLICATIONS

An Advanced, Multi-Featured Macro Program for Reviewing Logs (2012)
Standardized Macro Programs for Macro Variable Manipulation (2012)

PROFESSIONAL DEVELOPMENT

Calculus III, University of Illinois (2017)
Certification in Machine Learning, Stanford University (2013)
Epic Electronic Health Record: EpicCare Ambulatory, Resolute Professional Billing (2010)
America's Health Insurance Plans: Health Insurance, Operations, Managed Care (2009 to 2010)
Certified Nursing Assistant (2000 to 2004)