Samantha Zocher, RHIA

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EDUCATION:

Georgetown University Expected Graduation: August 2025

Master of Science, Health Informatics and Data Science

GPA: 4.00/4.00, Dean's Excellence Scholarship Recipient

Saint Louis University August 2020- May 2024

Bachelor of Science, Health Sciences, Health Information Management Concentration

GPA: 3.96/4.00, Presidential Scholar, Dean's List

ACADEMIC PROJECT EXPERIENCE:

Bladder Cancer Biomarker Exploration

- Conducted gene expression analysis in R using RNA-seq data to identify genomic changes across different cancer stages
- Identified altered biological pathways during disease progression, providing therapeutic insight

Clinical Attrition Rate Prediction

- Retrieved data from ClinicalTrials.gov via API to develop Python-based machine learning models predicting patient attrition rate in clinical trials
- Achieved an AUC-ROC of 0.768 with a Random Forest Model, identifying enrollment as the most influential predicter of patient attrition

WORK EXPERIENCE:

BJC Healthcare Saint Louis, MO

Health Information Technology Intern February 2024- May 2024

- Conducted a task analysis for the coding mismatch process, improving the allocation of CDI resources
- Responded to tickets and troubleshot digital health applications including Epic and 3M

The Cigna Group Saint Louis, MO

Health Data Analyst Intern May 2023-August 2023

- Predicted future denied claim trends for specialty medications using SQL and Tableau
- Proposed a predictive denial management model to improve the claim resubmission process

Kirby Medical Center Monticello, IL

Health Information Management Intern May 2022-August 2022

- Identified physician medical record deficiencies in incomplete surgical, inpatient, and outpatient records
- Coded medical records using ICD-10 and CPT codes in collaboration with the HIM director

PUBLICATIONS May 2023-December 2024

Functional Motor Change Across Time and Phenotypes in Amyotrophic Lateral Sclerosis

- Analyzed ALS clinic data in R and generated key insight to disease progression through demographic investigation, Kaplan-Meier survival analysis, and motor change trends across phenotype groups
- Co-authored a manuscript (currently in submission) in collaboration with the directors of Physical Therapy and Occupational Therapy at Saint Louis University

Impact of Comorbid Depressive and Anxiety Symptoms on Severity of Functional Impairment in Older Adults

- Performed the data analysis for a nationally representative study examining the relationship between mental, physical, and social health, contributing to a deeper understanding of their relationship
- Built a multivariate linear regression model in R to predict the relationship between activities of daily living functions and mental health status among older adults
- Published the manuscript in the Journal of Patient Centered Research and Reviews and presented findings at the ICTS Big Data Research Symposium to researchers from 4+ universities

SKILLS

- R Studio, Python, SQL, JavaScript, Tableau, Pentaho
- EHRs: Epic and Meditech