

• M E G A N S M I T H •

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Expert Data Analyst with a solid background in mathematics, data analysis, data visualization, and interpretation. Skilled in presenting complex data to diverse stakeholders, driving organizational performance with data-driven insights and innovative solutions. Experienced in using advanced analytical tools and techniques to drive decision-making and improve quality measures for 3 health plans. Certified in data analysis, with hands-on experience in SQL, Tableau, Python, R, and Excel, and a demonstrated history of success in corporate and educational settings.

SKILLS

Data Analysis: SQL | Tableau | Python | R | Excel | Domo

Data Visualization: Tableau | Python | Domo

Programming Languages: SQL | Python | R

Statistical Analysis & Machine Learning:

Multivariate Regression | Time Series Analysis | Anomaly Detection

Predictive Modelling | Correlation Analysis

Certifications & Leadership Training:

Explore Leadership Series – BCBSM

Domo Professional Services and Technical Certifications

Data Analytics Certification – Data Career Jumpstart

Recognition: EMMY Awards for Efficiency – Emergent Holdings

Other Programs: PowerPoint | Word | Canva | Google Suite

PROJECTS

SQL: [HEALTHCARE DATA](#)

- Utilized SQL to examine hospital patient data spanning 10 years and covering over 101,000 diabetic patients, identifying correlations between medical specialties and patient procedures and assessing the impact of race on medical treatments.
- Analyzed healthcare data to reveal equitable treatment for diabetic patients regardless of race, highlighting an inclusive approach and commitment to unbiased healthcare services.
- Translated analytical findings into actionable recommendations, including suggestions for optimizing hospital operations, enhancing patient care, and leveraging success stories for public relations initiatives.

TABLEAU: [EDUCATION DATA](#)

- Conducted school performance analysis to evaluate graduation rates and demographic data of 1,800+ schools, distinguishing top and bottom performers based on graduation statistics, economically disadvantaged students, and students with high needs.
- Investigated geographic patterns of educational outcomes using Tableau, mapping graduation rates to school locations and identifying clusters of high and low-performing schools, informing allocation and policy initiatives.
- Orchestrated the development of an interactive Tableau dashboard, presenting actionable insights to an analyst team at Kaplan Inc., proposing strategies to improve student support and enhance academic success.

PYTHON: [MANUFACTURING DATA](#)

- Interpreted manufacturing time series data containing 730,00 samples, investigating anomalies and identifying correlations between critical variables impacting plant performance.
- Applied statistical techniques using Python to identify linear correlations and generated data visualizations confirming the stability of critical variables.
- Developed Python visualizations to investigate fluctuations in material purity during manufacturing, indicating seamless operations and a 10% increase in desired material post-processing.

R: [HUMAN RESOURCES DATA](#)

- Utilized R programming language in RStudio to examine human resource data for 1,470 employees to investigate HR-related claims, effectively refuting allegations of ageism and income-based layoffs.
- Developed multivariate linear regression models to explore complex relationships between employee attributes, facilitating a deeper understanding of factors influencing monthly income and informing HR strategies, resulting in a 35% increase in predictive power compared to univariate models.
- Examined performance rating correlations, finding strong ties to percent salary hikes ($r = 0.77$) but not to monthly income or training attendance, leading to recommendations for targeted professional development programs.

WORK EXPERIENCE

EXPERT ANALYST, HEDIS STRATEGIC IMPROVEMENT

Emergent Holdings

11/2024 – Present

- Developed interactive Excel dashboards to visualize trends and KPIs for 9 HEDIS and Stars quality measures, improving leadership insight and contributing to targeted interventions for enhanced measure performance and data accuracy.
- Designed and presented provider organization dashboards to key stakeholders across 3 partner health plans, driving engagement and effectively communicating key performance drivers, success areas, and strategic opportunities for improvement.
- Created PowerPoint presentations comparing year-over-year performance of members within group business against those outside the groups, emphasizing high-impact performance drivers to facilitate collaboration between cross-functional teams.

MATHEMATICS EDUCATOR

Rochester Community Schools

08/2010 – 11/2024

- Engineered Excel spreadsheets to track student performance metrics and exam scores, identifying a 5% increase in overall student exam scores.
- Analyzed qualitative and quantitative student scores to determine standards and objectives that needed remediation, resulting in significant curriculum adjustments that upgraded the quality of 200+ instructional materials for cross-functional teams and faculty.
- Documented upfront and ongoing needs assessments for over 80+ targeted learners, including gap analysis, research, and evaluation to ensure 7+ courses matched curricula standards and identified opportunities for improvement.

EDUCATION

Master of Science in Industrial Applied Mathematics, *summa cum laude* requirements met | Oakland University

Bachelor of Science in Secondary Mathematics & Biology Education, *magna cum laude* | Rochester Christian University