Michael Beauchamp

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SUMMARY

M.S. in Predictive Analytics graduate from Northwestern University with a passion for enabling data-driven business insights. Extensive programming experience with SAS, Python, SQL, and R, complemented by skills in multivariate statistical analysis, machine learning, and data visualization tools like Tableau. Seeking a Predictive Analyst role to apply my expertise in predictive modeling, machine learning algorithms, and advanced data analysis to solve complex business challenges and enable decision-making processes.

EXPERIENCE

Carrier Corporation   Indianapolis, IN
Senior Analyst, Supply Chain Intelligence   Dec 2011 - Present

- Led the design, development, and implementation of 25+ SAP BOBJ Web Intelligence reports and interactive dashboards, providing real-time insights into supply chain KPIs and enabling data-driven decision-making.
- Built SQL stored procedures and ETL pipelines to integrate and prepare data for SAP and BOBJ platform implementations.
- Developed machine learning models in Python to improve demand forecasting accuracy by 15%, enabling superior supply planning.
- Performed multivariate regression and clustering analysis in R to identify predictors of customer churn and guide retention strategies.
- Applied data mining and predictive modeling techniques to identify demand patterns, resulting in a 10% improvement in demand forecasting accuracy and optimized inventory management.
- Played a pivotal role in improving SAS data models and data warehouse administration, ensuring data integrity, and enabling 33% faster query performance.

UnitedHealth Group – Optum   Franklin, TN
Data Engineer, Healthcare Analytics   May 2011 - Dec 2011

- Engineered an automated ETL pipeline to integrate Medicaid member data into on-premises databases enhancing data quality and accessibility.
- Built data architecture and Python ETL processes for loading healthcare claims data into databases.
- Implemented data quality checks and validation processes to ensure accuracy and reliability.
- Provided data engineering support for machine learning initiatives related to claims analysis.
- Communicated data insights to cross-functional teams to drive enhancements.

MRC Global   Tulsa, OK
Data Engineer, Supply Chain Analytics   May 2008 - Sep 2009

- Developed dynamic web applications using HTML, JavaScript, ColdFusion using SQL against Oracle back-end database.
- Performed statistical analysis in R to monitor data quality, identify anomalies, and recommend process improvements, improving data accuracy by 20%.
- Built end-to-end machine learning models in Python to predict inventory needs, enabling superior demand planning.

The Rowland Group   Tulsa, OK
Data Engineer, Pricing Analytics   Nov 2007 - May 2008

- Built machine learning models in Python to forecast product demand, improving sales projections by 10%.
- Designed MySQL database schema to allow for scalable storage and faster querying of large pricing datasets.

DataCom, Inc. Broken Arrow, OK
Software Engineer Nov 2006 - Nov 2007

- Built Microsoft SSRS reporting dashboard to uncover customer, product, and sales insights for executives.
- Designed contract and revenue web pages using ASP.NET and C#.

Northeastern State University Tahlequah, OK
Data Analyst, Enrollment Analytics May 2001 - Nov 2006

- Built logistic regression models in Python to identify factors influencing student enrollment, improving admissions forecasting by 30%.
- Designed MySQL database schema and ETL pipelines to integrate student data from multiple systems into a single database.
- Performed cohort analysis in R to track graduation rates across student demographics and guide retention initiatives.
- Implemented statistical models to predict students at risk of dropping out.
- Developed Excel visualizations to provide enrollment insights and trends to university leadership.

TECHNICAL SKILLS

- Proficient with SAS, Python, R, and SQL for data analysis, statistical modeling, and data visualization (Matplotlib, Seaborn, Power BI, and Tableau).
- Experienced with a variety of statistical modeling techniques, including regression, logistic regression, GLM, and clustering.
- Experienced using R for statistical analysis, modeling, predictive analytics, and interactive visualizations (ggplot2, plotly).
- Experience with machine learning approaches including regression, random forest, boosting, neural networks, clustering, and dimensionality reduction.
- Familiar with NoSQL databases Cassandra and MongoDB
- Cloud Platforms: Well-versed in AWS, Azure, GCP for cloud-based data solutions.

EDUCATION

- **MIT Professional Education** Boston, MA
  Certificate: Applied Data Science July 2023
  Completed Coursework in Predictive Modeling, Machine Learning, and Cloud Computing.

- **Northwestern University** Evanston, IL
  M.S. in Predictive Analytics March 2016
  GPA: 3.7

- **Northeastern State University** Tahlequah, OK
  B.S. in Mathematics December 2011