
DATA SCIENTIST

Machine Learning | Natural Language Processing (NLP) | Supervised and Unsupervised Learning | Client Relations
Technical Presales | Performance Tuning | Time Series Modeling | Project Management | Anomaly Detection
Data Visualization | User Research | Recommendation Engines | Data Preprocessing | Team Leadership

TECHNICAL PROFICIENCIES

Tools: dbt, Databricks, Talend, Git, Tableau

Languages: Python (NumPy, Pandas, Scikit-learn, PyTorch), T-SQL, R, CSS, HTML, JavaScript, XML

Databases: SQL Server, Snowflake, PostgreSQL, MySQL, Redshift

Methodologies: SPC, Kimball, Agile, Scrum, Waterfall

PROFESSIONAL EXPERIENCE

Principal Data Scientist PTC, REMOTE

2019 – PRESENT

Senior Data Scientist PTC, WAYNE, PA

2017 - 2019

Lead analytics projects at company that accelerates digital transformation through software and services with 1.9B annual revenue. Assess data use cases and perform data preprocessing to ensure viability of data-driven solutions. Applied advanced machine learning techniques on large-scale data sets to develop predictive models, enabling customers to meet diverse business goals. Translate complex findings into actionable insights accessible to technical and business stakeholders.

- Utilized Python and advanced SQL to co-develop Time Loss Analytics, an applied analytics feature for PTC's Digital Performance Management product to reduce a previously months long process to near-instant insights.
- Implemented proactive anomaly detection through applied statistical process controls (SPC), enhancing operational efficiency for manufacturing and medical device clients.
- Team leader and data analyst for client relationship generating over \$1M in annual revenue.
- Delivered POCs and production implementations of custom solutions to accelerate client value realization
- Drove end-to-end planning, coordination, and execution for successful client data platform insourcing effort.
- Performed client validation studies to verify the accuracy and usefulness of insights provided from custom algorithms, resulting in enhancements that improved client satisfaction.
- Spearheaded successful initiative to modernized client data platform, resulting in a significantly more stable system and reducing daily ETL process from two hours to under five minutes.
- Conducted in-person user interviews at UX lab during annual conference and presented findings to product owners and leaders to help prioritize development efforts based on customer feedback.
- Created 20+ hours of analytics training videos for PTC ThingWorx Analytics clients on topics such as data profiling, feature engineering, and phases of the analytics continuum.

Data Analyst Consultant XL GROUP (THROUGH ROBERT HALF TECHNOLOGY), PHILADELPHIA, PA

2016 - 2017

Data Analyst at technology solution provider specializing in digital marketing and performance processes. Worked independently to deliver data solutions and business analytics with tight deadlines in a results-oriented environment.

- Performed data mapping and analysis of source and target data source and reported on data quality.
- Helped identify issues with data structure of new system to facilitate proper import of legacy data.
- Enhanced ETL package to extract data in multiple formats for a Fortune 500 auto parts company.
- Created advanced stored procedures to automate the process to identify and rank top performing staff for a major European auto manufacturer employee incentive program.
- Contributed to corporate blog to publicize corporate identity and values.

Web Developer NORTH AMERICAN SAVINGS BANK, Kansas City, MO 2009 – 2014

Developed and managed projects for the finance/accounting sectors of regional bank with more than \$1B in assets. Utilized advanced T-SQL daily to create functions, stored procedures, ad hoc queries, views and tables for front end applications and data analysis. Created ETL packages for data driven processes.

- Participated in DNACreator beta program to customize the internal banking platform, subsequently presenting the code and application at Open Solutions' client conference in Las Vegas, NV.
- Architected and implemented dashboard for mortgage commitments to ensure regulatory compliance.
- Performed data mapping, design, and validation of enterprise SQL Server databases, overcoming challenges consolidating disparate architectures as part of end-to-end ETL data conversion of primary banking system.
- Championed significant improvements including coding standards and best practices.
- Created requirements and test plans for finance department, resulting in successful regulatory audits.
- Developed 100+ stored procedures and SSRS reports to establish comprehensive process to identify errors during cross checking of SEC and OTS financial filings.
- Created and maintained department newsletter to market IT department contributions.

Previous Experience

Consultant TEK SYSTEMS

Developer Analyst SURE MERCHANT, SAC CAPITAL ADVISORS, and ALLTEL INFORMATION SERVICES

Tech Support Manager VOYETRA TECHNOLOGIES/TURTLE BEACH and LEVEL 8 SYSTEMS

VOLUNTEER EXPERIENCE

BOARD MEMBER 2017 – 2020
Philadelphia SQL Server Users Group, Philadelphia, PA

FOUNDER AND CHAPTER LEADER 2017 – 2020
Delaware SQL Server Users Group, Wilmington, DE

SPEAKING ENGAGEMENTS 2018 – PRESENT
Speaker at SQL Saturday and numerous other technology events.

EDUCATION

UNIVERSITY OF WISCONSIN LA CROSSE, La Crosse, WI
Masters of Science in Data Science

NYACK COLLEGE, Nyack, NY
Bachelor of Science in Organizational Management, *graduated with highest honors*

Certifications/Training

- **Lakehouse Fundamentals**, Databricks, Sept 2022
- **Azure AI Fundamentals**, Microsoft, June 2022
- **Customer Analytics**, Wharton School (via Coursera.com), November 2016

Publications

- **Beyond the routine CBC: Research CBC parameters associated with myelodysplastic syndromes and underlying mutations.** Pozdnyakova O, Niculescu RS, Kroll T, et al. Blood, 2019
- **Lessons from deploying predictive analytics on manufacturing shop floor.** Romriell A, Niculescu R, Kroll T, Kessler D. Annual Reliability and Maintainability Symposium (RAMS), 2020.