

Neal Iyer

Data Analyst | McLean, VA | 240-644-7960 | neal.iyer88@gmail.com

Professional Summary

Federal Data Analyst with 4+ years in human capital analytics, data-driven decision-making, and workforce planning. Skilled in SQL, Python, Tableau, and Power BI, with a track record of optimizing HR processes through data analysis, reporting automation, and visualization.

Professional Skills

- **Data Analytics & Visualization:** SQL · Python · Tableau · Power BI · Advanced Excel · Advanced MS Office Suite
- **Human Capital & Workforce Analytics:** HR Metrics · Hiring Pipeline Analytics · Employee Retention Analysis · Workforce Planning
- **Data Management & Integrity:** Data Mining · Data Cleaning · Quality Assurance · Database Management · Process Optimization
- **Reporting & Decision Support:** Ad Hoc Reporting · Dashboard Development · Executive Presentations · Stakeholder Communication
- **Process Automation & Compliance:** Workflow Automation · Data Privacy & Security · Federal HR Policy Compliance
- **Strategic Insights & Decision Making:** Data-Driven Recommendations · Trend Analysis · Large Dataset Processing · Proactive Problem-Solving

Experience

Substance Abuse and Mental Health Administration, Department of HHS

Budget Analyst

Dec '23 - Mar '25

- Conducted data mining of critical human capital information across divisions to support strategic decision-making and hiring status evaluations, assessing effectiveness through comprehensive data analysis procedures to enhance workforce planning.
- Developed an Excel VBA-based incentive tracking system, integrating engagement analysis and survey design to assess incentive award effectiveness. Implemented automated validation checks and dynamic data processing workflows, increasing data accuracy by 85% and enhancing communication-engagement data insights for decision-making.
- Engineered a real-time Python-based payroll tracking system, integrating 10+ fund sources and 25 Lines of Accounting, leveraging SQL for data extraction and pandas for analysis, reducing reconciliation time by ~2 hours/month and improving payroll forecasting accuracy.
- Designed and optimized SharePoint-based data management processes, improving workflow automation and document version control for financial reporting.
- Conducted financial forecasting and variance analysis for a \$165M payroll budget, leading to actionable FTE adjustments and full-year payroll projections, optimizing workforce planning and budget allocation.
- Developed Power BI dashboards to provide real-time insights into budget utilization, payroll trends, and workforce analytics, enabling data-driven decision-making.
- Facilitated cross-functional workshops with stakeholders to gather insights that informed the optimization of decision pathways, resulting in a 30% reduction in processing time for budget approvals.
- Partnered with data science teams to analyze user interactions and optimize AI algorithms, reducing budget forecasting errors by 15% and improving overall accuracy in financial planning.
- Ensured compliance with federal regulations and data privacy laws in all human capital reporting and workforce analytics processes, effectively managing deadlines to ensure timely and accurate reporting.

CRI - Department of the Interior

Budget Analyst

Mar '21 - Dec '23

- Designed and implemented data quality improvement strategies, enhancing financial data accuracy by 20% across reporting platforms by identifying patterns and trends to drive continuous process enhancements.
- Led cross-functional collaboration with IT and Finance teams, improving financial database integration and analytics workflows.

- Developed workflow automation solutions using Python and SQL, streamlining reporting processes and reducing manual work by 15%.
- Created standardized annotation guidelines for financial reporting, ensuring consistency in data analysis and AI training datasets.

Cresa

Accounting Analyst

Dec '20 - Mar '21

- Performed data analysis on expense trends and revenue forecasts, supporting executive decision-making with clear insights.
- Reconciled financial data and provided structured reporting on budget allocations and marketing expenditures.

FrontStream

Fund Accountant

Aug '18 - Sep '20

- Automated financial reconciliation using SQL and VBA, reducing manual workload by 250+ hours annually.
- Managed a portfolio of nonprofit donations and executed data-driven decision-making for fund distribution.
- Designed real-time financial tracking dashboards, increasing transparency for major stakeholders.

Education and Certifications

Flatiron Data Science Bootcamp

Certificate | General Studies

- Advanced expertise in **Python, SQL, data visualization, machine learning, and feature engineering.**
- Built and optimized machine learning models for classification, regression, and time series forecasting (ARIMA, XGBoost, LightGBM, Random Forests, Gradient Boosting, Decision Trees) to extract insights from complex datasets.

University of Maryland (UMBC) - Baltimore County

Bachelor of Arts | Economics

HackerRank Intermediate SQL Certification

Projects

Capstone Project: Substance Abuse Risk Prediction using Machine Learning

github.com/nealiyer88/substance_abuse_risk | Predicting opioid abuse risk using classification models with key behavioral and substance use indicators.

- Developed a **predictive model** using machine learning to assess communication effectiveness based on audience engagement.
- Leveraged **NLP sentiment analysis** to extract insights from stakeholder feedback, improving messaging strategies.
- Built interactive **Tableau dashboards** visualizing campaign performance and optimizing communication approaches.

Zillow Real Estate Price Forecasting w/ Time Series (ARIMA)

github.com/nealiyer88/Zillow | Time series forecasting for real estate prices using ARIMA and advanced statistical modeling.

- Applied **ARIMA modeling and time series forecasting** to predict real estate price trends with improved accuracy.
- Conducted **data visualization and trend analysis**, enhancing insights for data-driven investment decisions.