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** [githubcom/nealiyer88/substance\_abuse\_risk](https://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)** [githubcom/nealiyer88/Zillow](https://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.