Terrance Oey

ECONOMIST · DATA SCIENTIST · DATA ENGINEER

Baltimore, MD

✉ oey.terrance@gmail.com | ⬛ oeyterrance | in terrance-o-0103a794

Skills

Programming	Python, R, SQL, Databricks, Spark, Tableau, Power Bi, SAS, Docker, ArcGIS, Matlab, Stata, Mathematica, EViews
Modeling	Artificial Intelligence (Large Language Models), Machine Learning (Random Forest, Decision Tree, Neural Network, Natural Language Processing, Grid Search, Logistic/Multi-linear Regression), Optimization, Genetic Algorithm, Forecasting (Holt-Winters, ARIMA), Static/Dynamic Discrete Choice, Simulation
Software	Microsoft Office Suite, Git, TFS/Azure DevOps, Linux, LaTeX

Experience

Federal Deposit Insurance Corporation   *Arlington, VA*

FINANCIAL ANALYST (DATA ENGINEER) (CG-14)   *January 2022 - Present*

- Leads and maintains the weekly Extract, Load, Transfer (ETL) process for over 100,000 rows of critical data, which is utilized by other analysts to determine fees to charge to financial institutions for insurance purposes.
- Automated the creation of 100s of historical financial reports using Python (openpyxl/pandas) in 15 minutes that normally took the analyst over 20 hours of manual work to create using legacy tools (SAS/MS Access/Excel).
- Utilized Power BI and SQL to automated a legacy financial product used across FDIC that originally used SAS, Access, and Excel.
- Project managing and contributing to the creation and update of a GUI tool using Python, that helps analysts across FDIC to do complex data queries with simple button clicks.
- Exploring utilizing AL/ML in the form of Large Language Models (LLMs) in Databricks and how it can be used with unstructured data such as summarizing information.

United States Citizenship and Immigration Services   *Camp Spring, MD*

MANAGEMENT AND PROGRAM ANALYST (GS-14)   *March 2019 - January 2022*

- Worked on hundreds of data requests from Congress, the White House, Department of Homeland Security (DHS), and the public that aid in policy-making with same day turnarounds.
- Led the analytical portion in updating the public facing USCIS front facing current processing times and the historical processing times websites for all immigration and naturalization forms on a monthly basis.
- Created, updated, and implemented explanations of the old and new processing times methodology on the more info webpage.
- Created and maintain multiple Tableau dashboards that summarizes critical information (receipts, approvals, denials, completions, pending, processing times) over 10+ fiscal years by location and form used by leadership.
- Created and maintain reusable code in Databricks/Cloud using Spark SQL and Python that vastly improved upon currently used code in SAS/Oracle that is used by the team (NPD Macro, TPS Macro, RADPPT Queries).
- Investigated data anomalies in a database and worked with multiple teams to resolve this issue that affected 7+ million records.

Social Security Administration   *Woodlawn, MD*

ECONOMIST (GS-13)   *November 2015 - March 2019*

- Worked with the Office of Modeling (OM) to help improve an anti-fraud model using various machine learning models, which determines the expected value of recovering overpayments from claimants, with the potential to save the agency millions of dollars.
- Developed a performance metric with inputs from SMEs for 100s of Social Security Administration's (SSA) employees working in the Office of Adjudication Operations (OAO) while utilizing resources such as the Enterprise Data Warehouse (EDW), SQL, SAS, and R with transactional data from Management Information Hearings Appeals and Litigation (MHAL) and Master Hearings and Appeals Operational Data Store (MHAODS).
- Led the sensitive data wrangling and analysis for the Impact of Administrative Law Judge (ALJ) Decision Writer Instructions on Decision Writers' Efficiency and Quality Project, where data was collected through a survey given to decision writers in the San Francisco Region (Region IX).

Summit Consulting LLC   *Washington, D.C.*

SENIOR ANALYST   *June 2014 - October 2015*

- Worked on a team with several PhDs at The U.S. Department of Treasury - Debt Management Services (DMS) to increase their delinquent debt collections and resolutions.

Education

Johns Hopkins University   *Baltimore, MD*

M.A. IN ECONOMICS   *August 2012 - June 2014*

- Received the Professor Joel Dean Undergraduate Teaching Award.

The University of Chicago   *Chicago, IL*

B.S. IN ECONOMICS   *October 2005 - June 2009*