# **Alex Harrods (Tatyana Okoneshnikova)**

e-mail: <u>alex.har.resume@gmail.com</u> | **GitHub portfolio**: <u>alexharrods.github.io/portfolio/</u> | **Tableau portfolio**: <u>https://public.tableau.com/app/profile/alex.harrods/vizzes</u>

#### **SUMMARY**

Recently certified in Data Analytics with one year of hands-on experience in data preparation and analysis, dashboard development, and HR analytics, along with over 15 years in project management, data collection, and educational program design. Skilled in Python, SQL, and Tableau. I'm passionate about unveiling the stories within data to help make good decisions. Eager to apply my analytical skills and leadership experience to a team focused on data insights, contribute to impactful projects, and help organizations achieve their goals.

#### **SKILLS**

**Programming:** Python (Pandas, NumPy, Scikit-learn, SciPy), SQL (MySQL, PostgreSQL), Clickhouse, Apache Airflow, Git **Data Visualization:** Tableau, Apache Superset, Python (Matplotlib, Seaborn, Plotly), DataLens, Redash **Design & Reporting:** PowerPoint, Adobe InDesign

#### **EXPERIENCE**

# Norder Digital Agency Junior Data Analyst

remote

August 2023 - Present

- Data preparation and development of regular KPI reports/dashboards
- Maintenance, refinement, and optimization of existing reporting
- Migration of BI content from Tableau to Apache Superset
- Forecasting revenue, expenses, and profit based on current and historical data; profitability analysis of projects
- Analysis of HR data (evaluation of training effectiveness and team performance)

# Educational Center Easy School Instructional Designer

Irkutsk, Russia Nov. 2009 – Mar. 2022

- Created 5 comprehensive English language courses (A1-C1) that are taught to over 2,000 students annually.
- Developed 12 English textbooks and 4 workbooks for adult learners, using learner-centered instructional strategies.
- Led a team of 5, working together to create effective teaching materials.
- Adapted educational programs for online formats using the latest visualization and multimedia tools.
- My efforts in designing courses and textbooks led to a 15% improvement in students' academic performance and a 20% increase in retention rates. This also contributed to a measurable increase in revenue.

## **FEATURED PROJECTS**

(more details at alexharrods.qithub.io/portfolio/ and https://public.tableau.com/app/profile/alex.harrods/vizzes)

#### Worst-Performing NYC Subway Lines in 2023 Through Comprehensive EDA

(https://github.com/AlexHarrods/Worst-Performing-NYC-Subway-Lines-in-2023-Through-Comprehensive-EDA)

- Identified the five worst-performing subway lines in New York City for 2023 using data from the Metropolitan Transportation Authority (MTA).
- Conducted a thorough Exploratory Data Analysis (EDA) focusing on train delays, major incidents, and customer journey metrics to assess subway lines performance.
- Discovered patterns of delays and incidents, including the impact of major incidents on specific lines, and analyzed passenger journey completion times.
- Analyzed the most common causes of delays and incidents, as well as monthly trends, and identified the biggest issues.
- Provided actionable insights that could help stakeholders identify problem areas and decide where improvements are most needed.

# Gender Pay Gap Analysis at The Ohio State University: A Statistical and Visualization Approach

(https://github.com/AlexHarrods/Ohio-State-University-Gender-Pay-Gap-2023-)

- Analyzed The Ohio State University 2023 Combined Earnings dataset, assessing regular pay, overtime, bonuses, gross pay, and other compensation for over 40,000 non-student employees.
- Used Pandas and NumPy for data manipulation, and Matplotlib and Seaborn for data visualization, including bar plots, count plots, box plots, and heatmaps.
- Conducted statistical tests (Chi-Square Test and Mann-Whitney) to evaluate gender pay disparities, revealing significant differences across all pay categories.

- Discovered gender disparities in gross pay, bonuses, overtime, and other compensation categories, highlighting underrepresentation of females in higher pay brackets.
- Identified structural inequalities in overtime pay distribution and flagged negative pay values for further investigation.

# Ohio State University Earnings 2023: EDA and Models

(https://github.com/AlexHarrods/Ohio-State-University-2023-Earnings---EDA-and-Models)

- Performed comprehensive exploratory data analysis on The Ohio State University 2023 Combined Earnings dataset using Pandas, NumPy, Matplotlib, Seaborn, Plotly, and Scikit-learn to assess earnings distribution, gender representation, and position group-based disparities.
- Implemented techniques like the Isolation Forest to detect and analyze outliers.
- Trained and evaluated regression models, including RANSAC Boosting, Huber Regression, Random Forest, Decision Tree, and Linear Regression to handle extreme values effectively.

### **New York Subway Ridership Visualization**

(https://public.tableau.com/app/profile/alex.harrods/viz/NYCMTASubwayRidership/Dashboard1)

- Created a set of Tableau dashboards to analyze over 1 billion subway rides, aimed at understanding ridership patterns across New York.
- Visualized data on ridership by time, borough, and payment method, providing insights for transit planning and dynamics.

#### **EDUCATION**

**Irkutsk State Linguistic University** English philology

Irkutsk, Russia