# Elena Svirko

Data Analyst with expertise in SQL, Python, Excel, Tableau, and SPSS, skilled in cleaning, analyzing, and visualizing large datasets. Experienced in data validation, dashboard development, KPI tracking, and presenting insights to both technical and non-technical stakeholders. Recently completed a Data Analytics program with hands-on training in real-world projects, reinforcing strong technical and communication skills for business-focused data analysis.

## Contact

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## Core Skills

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| **Data Analysis & Management:** | SQL (queries, joins, CTEs), Excel (advanced formulas, pivot tables), data cleaning and validation, workflow documentation |
| **Programming & Statistics:** | Python (Pandas, NumPy, Matplotlib, Seaborn), SPSS (advanced), regression classification, PCA, machine learning foundations (Keras/TensorFlow) |
| **Visualization & Reporting:** | Tableau (dashboards, storytelling), Power BI (basic familiarity), KPI development, stakeholder reporting and presentations |
| **Collaboration & Communication:** | Cross-functional teamwork, vendor coordination, stakeholder engagement, translating technical insights for non-technical audiences |

## Selected Projects

**Rockbuster SQL Analysis** - Queried relational database (PostgreSQL) to segment customers, identify top revenue contributors, and support market expansion strategy.

**Instacart Basket Analysis** - Applied Python and Tableau to uncover purchasing patterns, build customer segments, and generate recommendations for targeted marketing.

**ClimateWins: Weather Classification & Climate Modeling** - Built Random Forest and CNN models (Python, Keras/TensorFlow) to classify weather conditions. Applied dimensionality reduction (PCA) and EfficientNetB0 transfer learning to improve image classification performance.

## Professional Experience

**Research Data Analyst**                                                  Apr 2019 – Mar 2021

*Dept. of Experimental Psychology – University of Oxford (Remote)*

Analyzed longitudinal datasets (400+ participants) in SPSS and Excel, identifying behavioral trends and performance drivers to inform educational strategy.

Designed and managed remote data collection workflows, improving data quality, compliance, and efficiency across multiple projects.

Built dashboards and reports highlighting performance gaps and insights, enabling stakeholders to make data-driven decisions.

Supervised and mentored four junior researchers, standardizing processes and strengthening the team's data handling capacity.

**Research Data Analyst**                                                  Oct 2011 — Jul 2015

*Dept. of Population Health – University of Oxford*

Conducted multivariate analysis of national healthcare workforce datasets (10,000+ records) to identify trends in supply, retention, and career progression.

Built structured methods to code and analyze open-text survey responses, enabling quantifiable insights from qualitative data.

Produced executive-level reports and visualizations to guide resource planning and policy decisions at the UK Department of Health.

Modeled longitudinal survey data to assess how gender, ethnicity, and education impacted progression, providing evidence for diversity and workforce initiatives.

**Independent Data Analyst & Statistical Consultant**                     Jun 2010 – Sept 2018

*The Women's Centre, John Radcliffe Hospital, Oxford, UK*                  (various projects)

Cleaned, validated, and maintained a 70,000+ record neonatal and obstetric database**,** improving accuracy and reliability for ongoing analytics.

Analyzed clinical datasets to identify predictors of neonatal outcomes, producing insights that were used to refine clinical practices and published in peer-reviewed outlets.

Delivered visualizations, tables, and statistical reports for clinicians and administrators, supporting decision-making around patient outcomes.

Trained staff in SPSS and Excel workflows, improving long-term analytical capacity and data management practices.

## Education & Training

**Data Analytics Program -** *CareerFoundry, Online*                      Oct 2024 - Aug 2025

SQL, Python, Tableau, Excel, Machine Learning foundations with Keras/TensorFlow

**Doctorate in Psychology -** *Oxford University, Oxford, UK*             Sept 2006 - Sept 2011

**Masters in Research Methods in Psychology -** *Oxford University, Oxford, UK*   Sept 2004 - Sept 2005

**Bachelors in Experimental Psychology -** *Oxford University, Oxford, UK*   Oct 2001 – Jul 2004

1st Class Honours (4.0 GPA)

## Community Involvement

**Special Needs Classroom Volunteer** – *United Cerebral Palsy (UCP), Lake Mary, FL*   Sep 2023 – May 2024

Supported individualized learning goals and assessments

**English Language Editor** – *University of Eastern Finland, Joensuu, Finland*   Nov 2005 – Sept 2015

Edited academic publications for clarity and publication readiness