Andrii Fedorych

EDUCATION

Taras Shevchenko National University of Kyiv

Bachelor of Science in Computer Science; CGPA: 4.0/4.0

Sept. 2021 - May 2025 Kyiv, Ukraine

self-employed, part-time

Relevant Coursework:

 $Computer\ Programming (C++),\ Computer\ Networks,\ Object-Oriented\ Programming,\ Calculus,\ Discrete\ Math,\ Linear\ Algebra$

EXPERIENCE

Pravopysnyk Mar. 2022 – Present

Data Scientist, NLP Researcher

- Engineered reconcilers for genders, tenses, and declension generate the correct variation in 90% of cases, based on the Mova Institute model and Pymorphy2 morphological analyzer.
- Collected and researched data on synonymous constructions, based on it generated a **45,000-word** dictionary with a unique **asymmetric correlation** between words using **PDFMiner** and **NetworkX**.
- Implemented more than 20 rigorous rules that can be applied to sentences by brute force.
- Produced a dataset of **2.5 million** most used **words** in the Ukrainian language, based on **web scraping** public articles using **Beautiful Soup**.
- Developed an **identifier of borrowed words**, it has a probability of **100%** detection of the wrong word and finding the Ukrainian counterpart from the previously generated dictionary.

Projects

Rocket Landing Prediction O | Jupyter Notebook, Sklearn, Pandas, Folium, Dash, BeautifulSoup

- Acquired and converted data over 100 Falcon9 rocket launches using web scraping(BeautifulSoup) from Wikipedia pages and open source REST API for SpaceX.
- Performed Exploratory Data Analysis, which allowed to determine 6 prime parameters for the further model, used Matplotlib and Seaborn visualization libraries to plot different charts.
- Developed an **interactive dashboard for visualization**, which displays all changes in the dataset in **real-time**, based on the **Plotly Dash** and **Folium**.
- Researched and built a **machine learning model**, which predicts the landing status of a rocket with a probability of **83.3%**, using the **Sklearn** framework.

Vehicle Collisions Analizator () | Python, Streamlit, Pydeck, Pandas

- Built a multipage data science web application, which demonstrates the results of road accident research, using the open source framework Streamlit.
- Researched the data and found the 5 most dangerous streets in cities and the desired **optimal location** of hospitals, thanks to **Pandas** and **Numpy**.
- Developed interactive maps capable of displaying 100,000 records from a dataset per site in less than a second using Streamlit and Pydeck.

Credential and Certificates

Google Data Analytics Professional Certificate **G**

Aug. 2022

- Passed 8 courses specially developed by Google, which included lectures, hands-on tasks, and a capstone project.
- Collected knowledge on how to prepare, process, analyze, and share data for thoughtful action and business
 decisions.
- Learned to practically use tools and platforms, including spreadsheets, SQL, Tableau, and R.

IBM Data Science Professional Certificate Program

Sep. 2022

- Completed 10 courses from IBM, developed hands-on skills using the tools, languages, and libraries used by professional data scientists.
- Imported and cleaned data sets, analyzed and visualized data, and built and evaluated machine learning models and pipelines using Python.
- Applied various data science skills, techniques, and tools to complete a project using a real-world data set and publish a report for stakeholders.

KSE Artificial Intelligence: Overview & Business Applications

Jul. 2022

- Entered the top 30 students from over 200 candidates and completed 13 tasks offered by the Kyiv School of Economics
- Created several models (Random Forest, K-Nearest-Neighbor, K Means Clustering) that improved the profitability of the simulated company by 2.5 times, thanks to the acquired skills in working with KNIME (The Konstanz Information Miner).

SKILLS SUMMARY

Languages: Python, C++, R, Swift

Frameworks & Libraries: Sklearn, Pandas, Numpy, BeautifulSoup, PDFMiner, Streamlit, Seaborn, Matplotlib, Pydeck Tools & Technologies: SQL, Git, GitHub, OpenAPI, KNIME, Google Colaboratory, Jupyter Notebook, PyCharm, CLion