Alex Ostapenko

Work Experience

Research Scientist
University of Toronto
October 2023- Present

- Developed a **machine learning** pipeline using **Python** (PyTorch, deep learning, regression, clustering) for new materials discovery.

Software Developer
D2A Analytics
June 2023 - Present

- **Developed** and **deployed** sentiment analysis application using **Python** (Streamlit, LLM)

Research Assistant
University of British Columbia
September 2021 - August 2023

- **Image analysis**, 3D modeling, and statistical analysis of data using **Python**(numpy, scipy, astropy, etc.) and R
- Simulations using CASA astronomical software
- **Developed a Python package** for statistical analysis and data visualization
- Created a new observational project for ALMA interferometer (7th biggest telescope in the world) which was selected among >1700 other projects

Science-Policy Research Assistant
September 2022 - May 2023

- Examined metals concentration increase from **satellites** re-entries in Earth's atmosphere using **Python**.

Intern
Jagiellonian University
July 2019, July 2020

- Performed time series, and **statistical analysis** which resulted in **scientific publication**

Education History

Master of Science in Physics and Astronomy
The University of British Columbia
Year of Graduation: 2023

Bachelor of Science in Physics and Astronomy
Taras Shevchenko National University of Kyiv
Year of Graduation: 2021

Contact Info

Click here for my portfolio

linkedin.com/in/oleksandra-ostapenko

- oleksandra.ostap@gmail.com
- +14372595674
- Toronto, ON, M4V 1N5

Relevant Skills

- **Python**, R, **MATLAB**, SQL
- Version Control (Git), Remote Computing (ssh), **HPC**, Bash Scripting, macOS, **Linux**, **Windows**
- QC/Processing tools
- Jira, Trello
- Streamlit, Mathematica, Microsoft Office, HTML/CSS, Latex

Side Projects

Survey Analysis Automation (link)
Developed software for Google and Microsoft Forms analysis automation.

Ainfer (link)
Developed a tool based on Cohere LLM to extract the information from any text file in over 100 languages

OSI Junior Fellow (link)
Examined light and atmospheric pollution from satellites