Olena Verbytska

PhD Researcher

Montpellier, France ☑ olena.verbytska@umontpellier.fr github.com/OlenaVerbytska in olena-verbytska



Profile

Passionate about applying AI to healthcare, with a solid foundation in machine learning, deep learning, and statistics. A fast learner, skilled at communicating complex ideas within interdisciplinary environments, and experienced in bridging the gap between theory and practical implementation. Ukrainian citizen with a valid work permit for France.

Research interests: deep learning, computer vision, multimodal data integration, Al for medicine.

Experience

11/2025 - Present **PhD Researcher**, PhyMedExp Institute (INSERM, CNRS, University of Montpellier), Montpellier, France

> • Conducting research on "Predicting and understanding drug-free remission in rheumatoid arthritis using longitudinal data and artificial intelligence" under the supervision of Prof. Zubeyir Salis.

04/2024 - 10/2024 Data Science Intern, Sorbonne Center for Artificial Intelligence (SCAI), Paris, France

• Developed a computer vision pipeline for endometriosis detection in ultrasound videos using YOLO. Conducted a literature review and prepared the dataset. The results were presented at a conference; detailed report.

05/2022 - 09/2022 **Data Science Intern**, *Inria, Kopernic Team*, Paris, France

• Designed and implemented a Python class for custom Mixture Model with Expectation-Maximization (EM) algorithm. Analyzed real-time systems through probabilistic modeling. Co-authored arXiv preprint; implementation.

11/2021 – 04/2022 **Biostatistician Intern**, *Veranex*, Kyiv, Ukraine

 Completed training in CDISC (CDASH, SDTM, ADaM) and SAS programming for clinical trial data analysis.

Skills

Languages & Libs Python (PyTorch, scikit-learn, numpy, pandas, matplotlib, OpenCV), R, SAS, SQL

Tools Git, LaTeX, Canva, GIMP

Concepts Supervised and unsupervised learning, deep learning, statistical modeling, exploratory data analysis, feature engineering, computer vision, CNNs (YOLO, Faster R-CNN)

Education

2022 – 2024 Master's in Statistics and Learning, Applied Mathematics,

Sorbonne University, France

2019 – 2022 Bachelor's in Mathematics.

Shevchenko National University of Kyiv, Ukraine

Languages

English Advanced (C1)

French Intermediate (B1)

Ukrainian Native/Bilingual

Russian Native/Bilingual