ANASTASIYA BYELYAKOVA

- nasbelyakova@gmail.com
- +380684892203
- linkedin.com/in/anastasiya-byelyakova
- github.com/AnastasiyaByelyakova

SKILLS

Programming & Data Science

Python, OOP, SQL, MongoDB Statistical Analysis, FAISS Machine Learning, Deep Learning N8N

Cloud Technologies

AWS S3, EC2, Lambda, Redshift Google Compute Engine

AI Technologies

Gemini, ChatGPT, LangChain

Technical Specializations

Natural Language Processing
Web Scraping
Data Processing & Visualization
Machine Learning & Deep Learning

Tools & Frameworks

TensorFlow, Keras, scikit-learn pandas, numpy, matplotlib, seaborn spaCy, transformers, NLTK Flask, Docker, PySpark, Dask selenium, playwright

CERTIFICATIONS

Programming for Everybody (Python) Coursera

The Data Scientist's Toolbox Coursera

Python for Genomic Data Science Coursera

Algorithms for DNA Sequencing

Bioinformatics Methods I & II

Introduction to Genomic Technologies

Finding Hidden Messages in DNA

Nanotechnology and Nanosensors

Systems Biology Methods

Python Programming Projects Udemy

Sololearn

Diploma in C Programming

SQL Fundamentals

PROFESSIONAL EXPERIENCE

Data Analyst

Kyros AI

August 2021 - June 2025

- Scraped websites to extract data, details and answers using extensive NLP techniques with spaCy and transformers for text cleaning, NER and summarization
- Integrated AI technologies (Gemini and ChatGPT with LangChain) including FAISS for enhanced data processing
- · Performed image processing for websites including background optimization and cropping
- Built predictive models for university ROI and student acceptance probability using machine learning
- Developed predictive models for summer program selectivity using TensorFlow, scikit-learn and XGBoost
- Created classification models for categorizing essay examples using scikit-learn and XGBoost
- Developed advanced chatbots to answer student inquiries using AI technologies
- Analyzed acceptance rates using AI models and statistical methods
- Developed Python scripts for automating data processing workflows
- Conducted research on educational materials contributing to new learning resource development
- Processed PDF files to extract specific information using AI and TensorFlow tools

Data Analyst

DataOhrii

May 2017 - August 2021

- Created spaCy models for POS tagging and named entity recognition in text processing
- Developed NLTK models for text chunking and natural language processing
- Built web scraping solutions to extract job opening information from company platforms
- Implemented CNN classifiers for image recognition using transfer learning on Inception v3
 (TensorFlow) for COVID detection on lung X-rays, dog breed classification, cosmetics brand
 recognition, and real-time car counting
- Developed LSTM models for sales volume prediction based on historical data using Keras
- Created Flask APIs for MongoDB database access and user authorization systems
- Built LSTM and Random Forest models for financial price direction prediction
- Performed statistical analysis of Indian company price datasets using pandas, matplotlib, and seaborn

PhD Student & Researcher

Università deali Studi di Siena

February 2014 - February 2017

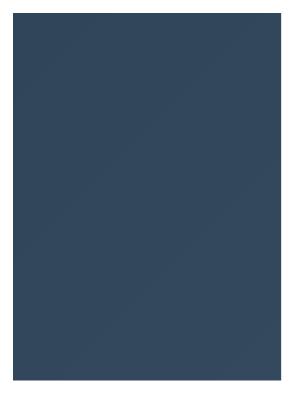
- Analyzed olive oil samples for acidity compliance with European Regulations No 2568/91 and No 2015/1830
- Performed chemical characterization of olive oil, fruits, leaves, and pomace samples
- Conducted antioxidant activity analysis using TEAC assay and spectrometric methods
- Quantified polyphenols content using Folin-Ciocalteu method
- Performed ion content analysis (K, Na, Ca, Mg, Mn, Cu, Zn) using atomic absorption spectroscopy
- Optimized RH-HPLC-MS methods for polyphenolic compound quantification
- Investigated olive oil production by-products for quality improvement applications

Teaching Assistant

University of Geneva

February 2013 - October 2013

- Contributed to research in photoswitchable Na/pH optical and potentiometric sensors
- Developed optical sensor nanoparticles for UV-Vis absorption and fluorescence applications
- Worked on fluorescence-based optical sensors for calcium detection



EDUCATION

Master of Science (MSc) - Analytical Chemistry

Taras Shevchenko National University of Kyiv

2010 - 2012

Thesis: "Determination of 1,4-Dioxane by headspace GC with preconcentration by SPE"

Coursework: Gas Chromatography, HPLC, Environmental Analytical Chemistry, Physical Methods of Analysis, Nanochemistry, Pharmaceutical Chemistry, Instrumental Analysis, Bioanalytical Chemistry, NMR Spectroscopy

Bachelor of Science (BSc) - Chemistry

National University of Kiev-Mohyla Academy

2005 - 2009

Thesis: "Modification of PETF membranes by graft-copolymerization of N-VIA initiated by ATRN"

Coursework: Biochemistry, Genetics (General & Molecular), Cytology, Histology, Virology, Microbiology, Developmental Biology