pavelmakarovmail@gmail.com
6177945725
Boston, United States
pavelmakarov.com
linkedin.com/in/pavelmakarov90
github.com/PavelM90

## SKILLS

- Python (pandas, scikit learn, Pytorch, Keras, pyteomics, biopython)
- Machine Learning
- AWS
- SQL
- Tableau
- R Programming
- Statistical Analysis

## LANGUAGES

English
*Full Professional Proficiency*

Russian
*Full Professional Proficiency*

Spanish
*Limited Working Proficiency*

German
*Elementary Proficiency*

## PUBLICATIONS

*Research paper*
**The Impact of the Complexing Cation on the Sensitivity of the Collisional-Induced Dissociation Spectra to Fatty Acid Position for a Set of YXY/YYX-type Triglycerides**
*Author(s)*
Pavel Makarov , Dong Zheng , Duc Le, Jason J Evans
*06/26/2018*

# Pavel Makarov

## Data Scientist

Seasoned data scientist specializing in real-world problem-solving through advanced analytics and machine learning

## WORK EXPERIENCE

### Scientist/Data Scientist
Moderna Tx
*08/2020 - Present* — *Norwood, MA*

- Built predictive models using the Random Forest machine learning algorithm to provide recommendations on RNA product quality
- Programmed Python-based tools for RNA and DNA analysis
- Generated Excel-based application for liquid handlers, eliminating manual human labor by 70%
- Developed 10 methods for RNA structural and functional analysis - cap, tail, and sequence coverage
- Mentored junior staff in data analysis techniques and the use of analytical software

### Data Analyst
VIR Biotechnology
*08/2018 - 08/2020* — *San Francisco, CA*

- Experienced with Rosetta for protein structure prediction and PyMOL for detailed analysis of X-ray crystallography data
- Generated SQL based databases for biological research products and protein sequences
- Generated 5 LC-MS methods ( native, top-down, bottom-up and chemical cross-linkage) for protein sequencing and structure analysis

## EDUCATION

### Master of Data Science
Bellevue University
*05/2023 - 08/2024*

### Bachelor of Science in Biochemistry
University of Massachusetts, Boston
*01/2016 - 05/2018*

## PERSONAL PROJECTS

Academic Machine Learning experience

- Trained a VGG16 Convolutional Neural Network for breast cancer recognition model
- Developed a XGBoost machine learning algorithm to provide recommendations on earnings maximization
- Developed multiple regression models for price prediction, achieving a high coefficient of determination (R^2 = 0.78)

## CERTIFICATES

IBM Data Science Specialization – Coursera

Introduction to Deep Learning & Neural Networks with Keras - Coursera