ARTEM LEBEDEV

MS in Data Science

PhD in Life Science

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DATA SCIENCE

TensorFlow · Keras · Scikit-learn
PySpark · Hadoop
MLlib R · tydyverse
Anova · bootstrap · hypothesis testing
CNN·Random Forest· GLM · Time Series
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DEV AND DEVOPS

Python · Postgres SQL · MongoDB
Linux · Amazon EC2 · GCloud
Databricks · Flask · Gunicorn · NGNX
VB.NET · WinForms
Git CLI · Conda CLI · LaTeX

LIFE SCIENCE

Oncology · Hypoxia · Inflammation
Molecular Imaging · Pharmacology
Small animals · Cell cultures
Wet chemistry · Radiolabeling
Clinical trials · Method validation

PROJECTS

2021 – 2023 **Detection of bacterial colonies in Petri Dishes** — **Feasibility study for LabLogic Inc.**
Image classification to "sterile" and "contaninated" Petri Dishes, based on pre-trained neural networks: Efficient Net, VGG16, ResNet, Inception
`OpenCV / CNN / YOLOv8 / Python`

2023 – present **Sales analysis and forecasting** — **McMaster Nuclear Reactor**
Created a sales analysis web portal: a PostGreSQL database coupled to a Flask-based web app, running on Gunicorn webserver. The data allows for SARIMA time-series based sales forecasts.
`Flask / SQL / Time series / PostGreSQL`

2013 – 2019 **Optical spectra analysis for Quality Control System** — **Trace-Ability, Inc.**
Developed algorithms for processing of optical signals from absorbance, luminescence and fluorescence measurements to extract quality control data suitable for FDA-compliant drug manufacturing. Wrote production code for automated peak finding on the chromatogramms, noise reduction, spectral normalization and outlier detection.
`Signal processing / C#`

2012 – 2013 **UI and hardware for experimental drug manufacturing system** — **UCLA**
Build an prototype liquid-handling system aided by radiation and optical sesnors. Devloped a C#-based software that allowed for asynchronous operations of the hardware, UI and data aqusition boards. The system was featured in two academic pubilcations.
`Signal processing / WinForms / Async Programming`

2012 – 2013 **Sensor signal processing for automated chemistry modules** — **Siemens Healthcare**
Developed an algorithm for liquid transfers in a GMP-compliant automated drug manufacturing system. Processing a stream of data from various sensors, algoritm controlled liquid-handling hardware. The system was used in FDA-compliant manufacturing of radioapharmaceuticals.

EDUCATION

2021 – 2024 **Master in Data Science** — **University of California Berkeley**
Coureses: ML at scale, Applied ML, Statistics for data sceience, Data engenering, Time series and panel data, Research design, Data Sceince programming

2002 – 2005 **PhD in Chemistry** — **Moscow State University**
Thesis: New aspects of Pd-catalyzed amination and its application in metallocene synthesis

EXPERIENCE

2022 – Present **Commercial Manager** — **McMaster Nuclear Reactor, Canada**
Business developement and sales process for medical isotopes business

2015 – 2019 **Chief Technology Officer** — **Trace-Ability,Inc, Los Angeles, CA**
Technical founder, oversaw development and productization of software-hardware complex for quality control of radiopharmaceuticals.

2013 – 2015 **Associate Project Sceintist** — **University of Claifornia, Los Angeles**
Development of small molecules for imaging of inflammation in tumor models.

LANGUAGES

English - fluent
Russian - native

HOBBIES

Hydroponic gardening,
rock climbing, trail running

ACADEMIC PUBLICATIONS

27 peer-review papers, 11 patents,
h-index 16