

# Vladyslav S.

## Senior Senior Data Scientist

### SUMMARY

- Senior Data Scientist with deep expertise in Machine Learning and Computer Vision
- Proficient in Python, C++, and various data science libraries such as NumPy, Pandas, and scikit-learn.
- Holds a Doctor of Philosophy degree in Computer Software Engineering from Kyiv Polytechnic University.

### TECHNICAL SKILLS

<b>Main Technical Skills</b>	Python (7 yr.)
<b>Programming Languages</b>	C, JavaScript, Python (7 yr.), Rust
<b>Python Libraries and Tools</b>	aiohttp, Matplotlib, NumPy, Pandas, PyQt, Scikit-learn, SciPy, Seaborn, TensorFlow
<b>Python Frameworks</b>	Django, Flask
<b>UI Frameworks, Libraries, and Browsers</b>	Dlib
<b>AI &amp; Machine Learning</b>	NumPy, OpenCV, Scikit-learn, TensorFlow
<b>Data Analysis and Visualization Technologies</b>	Jupyter Notebook, Pandas
<b>Databases &amp; Management Systems / ORM</b>	PostgreSQL, SQLAlchemy, SQLite
<b>Amazon Web Services</b>	AWS Boto3, AWS S3, AWS SQS
<b>Azure Cloud Services</b>	AzureSQL
<b>Scripting and Command Line Interfaces</b>	Bash
<b>Mail / Network Protocols / Data transfer</b>	cURL

<b>Virtualization, Containers and Orchestration</b>	Docker
<b>Codecs &amp; Media Containers</b>	Ffmpeg
<b>Version Control</b>	Git
<b>Logging and Monitoring</b>	Grafana
<b>Third Party Tools / IDEs / SDK / Services</b>	MatLab
<b>QA, Test Automation, Security</b>	Postman
<b>Operating Systems</b>	Unix, Windows
<b>Other Technical Skills</b>	CSS/HTML, Wolfram Mathematica

### Senior Data Scientist

Duration: Sep 2022 - Present

Project: HVAC (Heating, Ventilation, and Air-Conditioning Systems), MPC (Model Predictive Control)

Responsibilities / Accomplishments:

- Prevent and fix incidents on production that are reported by the operations team
- Refactor and improve the current codebase
- Writing unit tests
- Improve CI/CD pipelines
- Doing energy disaggregation and R&D

Technologies:

- Languages: Python
- Libraries: SymPy, statsmodels, SciPy, Plotly
- Frameworks: PyTorch, streamlit
- OS: Linux
- Other: scikit-learn, ray, optuna

### Lead Data Scientist

Duration: Jul 2022 - Present

Project: Medical project for classification and segmentation of the fundus images for diabetic retinopathy signs.

Responsibilities / Accomplishments:

- Implementation and training of various SOTA Neural Network architectures to solve different tasks in the Computer Vision domain.
- Work on the improvement and maintenance of the customer-specific annotation tool that allows us to manage the arrival of new data conveniently.
- Design and implementation of end-to-end MLOps pipelines that cover all stages of the model life-cycle from data preparation to



automatic redeployment.

- Building efficient and scalable API's for trained Neural Networks.
- Performing analysis of different forms to satisfy customer requests: visualizations, reports, etc.

Technologies:

- Languages: Python
- Libraries: OpenCV, matplotlib, pandas, NumPy, Tensorflow/Keras
- Frameworks: PyTorch/PyTorch Lightning
- Databases: PostgreSQL, SQLite
- OS: Linux
- Other: Docker, AWS(sagemaker, S3), vision transformers, advanced training

### **Lead Data Scientist**

Duration: Jul 2019 - Jun 2022

Responsibilities / Accomplishments:

- Development of high-load distributed user's involvement measuring solutions by exploiting eye tracking, emotion, and attention measurement technologies.

Technologies:

- Languages: Python, Rust, WebAssembly
- Libraries: OpenCV, Tensorflow
- Frameworks: Django
- Databases: PostgreSQL
- OS: Linux
- Other: Amazon S3, SQS, EC2

### **Machine Learning Engineer**

Duration: Feb 2018 - Jul2019

Responsibilities / Accomplishments:

- Research in the field of eye tracking/emotion measurement: data engineering, software development, machine/deep learning, model deployment.

Technologies:

- Languages: Python, C++
- Libraries: OpenCV, Tensorflow
- OS: Linux
- Other: Dlib

### **Computer Vision engineer**

Duration: Jan 2017 - Feb 2018

Responsibilities / Accomplishments:

- Research in the field of automated gaze direction estimation.

Technologies:

- Languages: Python
- Libraries: OpenCV, Tensorflow

### **Research and Development Specialist at StartUp**

Duration: Nov 2016 - Aug 2017

Responsibilities / Accomplishments:

- Software architecture;
- Research in the field of automated music transcription.



Technologies:

- Languages: Python
- Libraries: Tensorflow

### **Computer Vision Researcher**

Duration: Jun 2016 - Aug 2016

Responsibilities / Accomplishments:

- Research in the field of medical diagnostics, based on analysis of microscopic images of dry residue of human saliva.

Technologies:

- Languages: C++
- Libraries: OpenCV

### **Certifications & Courses**

- Structuring machine learning Projects - Coursera
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization - Coursera
- Neural Networks and Deep Learning - Coursera
- Machine Learning - Coursera

