

# YELIZAVETA FALKOUSKAYA

#### **WORK EXPERIENCE**

## **R&D ML Engineer Intern**

**Xperi Inc.** [ 11/2022 - 02/2024 ]

City: Galway, Ireland

Developing and analysis of experiments and machine learning models on phychophysiological characteristics within the context of automotive cases. A core research direction included the development of non-invasive techniques that can predict intoxication levels and read person's bio-signals such as heart rate and respiratory rate from near-infrared (NIR) and long-infrared (LWIR) images.

Topics: Deep Learning, CAN, LSTM, Signal processing

## **Creditor Control Department Assistant**

**Tumlare corporation** [ 01/2020 – 06/2020 ]

City: Saint-Petersburg, Russia

Handling invoice processing and overseeing the collection of payments and debts, including managing accounts receivable and payable. Generating statements and preparing analytical reports to provide insights into financial performance. Collaborating with customers and the sales team to address inquiries and facilitate smooth transactions.

#### **EDUCATION AND TRAINING**

## **Master in Statistical Methods and Applications**

Sapienza University of Rome [ 20/09/2021 - Current ]

City: Rome, Italy

Field(s) of study: Natural sciences, mathematics and statistics

Thesis: Leveraging Self-attention mechanism in Deep Learning for Alcohol Intoxication Detection and

Drunkenness Identification

### **Bachelor in Corporate Finance**

Saint-Petersburg State University of Economics [ 01/09/2016 - 01/07/2020 ]

City: Saint-Petersburg, Russia Field(s) of study: Economics

Final grade: 4.6/5.0

## **Business Administration Exchange Semester**

**Dresden University of Applied Sciences** [ 01/03/2019 – 01/08/2019 ]

City: Dresden, Dresden

Field(s) of study: International Business

#### **LANGUAGE SKILLS**

Mother tongue(s): **Russian** | **Belarusian** 

Other language(s):

**Italian** Polish

LISTENING B1 READING B1 WRITING A1 LISTENING C1 READING C1 WRITING B1

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2 SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

## **English**

LISTENING C1 READING C1 WRITING C1

#### SPOKEN PRODUCTION C1 SPOKEN INTERACTION C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

#### **SKILLS**

### Other skills

Python (NumPy, Pandas, Scikit-learn, Keras, Pytorch, Lightning)

Signal Processing

R

Matlab

Supervised Learning (Linear and logistic regression, Decision trees, SVM, Naive Bayes)

Unsupervised Learning (K-Means Clustering, PCA)

Deep Learning

Machine Learning

Big Data

Web Scraping

SQL

#### **RESEARCH ACTIVITY**

## **Deep Learning Approaches for Alcohol Impairment Detection**

[ 11/2022 – Current ]

Optimism Prediction and Concordance Analysis: Unraveling Demographic Correlations through Classification Modeling and Feature Importance Algorithms

[ 02/2022 - 07/2022 ]

Comparing Machine learning models performance to predict company's travel insurance sales [ 10/2021 - 01/2022 ]

Management of the company's financial resources in a changing exogenous environment [ 09/2019 - 07/2020 ]

Methods and models for predicting bankruptcy of an enterprise

[02/2019 - 07/2019]