Maria Zhirko

Software Engineer



Education

2022 June Belarusian State University of Informatics and Radioelectronics; Faculty:

Faculty of Information Technologies and Control;

Degree: Artificial Intelligence.

2018 Minsk Gymnasium 29; Educational focus: English and Mathemathics.

IT Skills

Software Development:

Programming languages: Python, C++, Java, SQL, Bash; **Frameworks:** numpy, pandas, matplotlib, OpenCV, Keras; **Tools:** Docker, Docker Compose, CI/CD, Git, Gradle, MySQL.

Operating Systems:

Linux: Xubuntu, Ubuntu, Mint;

Other: Microsoft Windows, MacOS Sierra.

Language Skills

Fluent: English;
Basic: German;
Native: Belarusian;
Native: Russian.

Projects

Parking lot control system:

Project link: https://github.com/mzhirko/convenient-parking

An application for recognizing free parking spaces using M-RCNN.

Programming language: Python;

Tools: Docker, Keras, Tensorflow v.1, OpenCV.

Image compression tool:

Project link: https://github.com/mzhirko/image-compressor

An application for compressing images using conception of recirculation neural network with adaptive learning step and normalization of weights.

Programming language: Python.

Documentation writing:

Project link: https://github.com/mzhirko/amusement-park

The conception of a project is to show documentation writing skills, based on knowledge of certain projecting patterns such as KISS, SOLID etc. The advantage of writing documentation as code is in its convenience to develop document and control changes.

Tools: Asciidoc, PlantUML.

Visualized minimum cut algorithm:

Project link: https://github.com/mzhirko/minimum-cut-of-an-undirected-graph

This project demonstrates the work of Stoer-Wagner algorithm, that is used to find a minimum cut of a graph. Demonstrantion is visualized with graphviz tool

Programming language: C++;

Tools: Graphviz.

Java Toolbars:

Project link: https://github.com/mzhirko/javafx-basics

Project with a configured CI. Shows different visuals made by using JavaFX lib.

Programming language: Java; Tools: Gradle, Github CI.

Personal Interests

Hobbies:

travelling, driving, drawing, art, self-education, walking, baking, communication, electronics, classical literature & music.

Perspectives

Grow and develop soft and hard skills in order to correspond surrounding requierements;

Take an advantage of doing hard tasks to get higher on the proficiency scale;

Passion to work with high-loaded, scalable, distributed, real-time information processing systems;

Desire to improve myfelf in the scientific field.