Ivan Vereshchagin — Java | Python | Kotlin -developer

- Middle
- Россия
- 150 000 - 500 000 ₽ (руб/мес)
- Полная занятость | Фриланс | Частичная занятость
- Удаленная работа
- Релокация
- Контакт: geeklink.io/cv-34529

Навыки

FastAPI, Flask, Hibernate, Java, Kotlin, Matplotlib, Pandas, Python, Seaborn, Sklearn, Spring, SQLAlchemy, TensorFlow.

Опыт работы

- **System Solutions**

  10.2023-present - java-developer

  I create backend micro-services system for the web and mobile applications. Partially worked as a DevOps engineer: organized docker containers, deployed a k8s cluster.
  In addition, I organized data migration using Ni-Fi and SpringStateMachine.
  Developed a mechanism for filling data from various sources (Databases, file system, Minio) based on the event system and KafkaStreams for creating reports.
  Created a Data Warehouse (DWH) system for logging and recording all client actions using Kafka Streams.

- **Bank FORA-BANK (Joint Stock Commercial Bank)**

  09.2020-10.2023 - java-developer

  I create backend services for the Fora-Online mobile application. I have developed and implemented a module for sending SMS and PUSH notifications. Moreover, I have created service for making payments and transfers both within the bank and through the SBP-system. The development was carried out in the Java language using the Spring frameworks (including Spring boot), PostgresSQL database. I create communication services with other bank system through REST API and SOAP.

  I created a computer vision system based on the YOLO neural network, which counts the number of customers who came to the bank branch and turned to the teller. A related system using the pandas, numpy, matplotlib libraries analyzes the results of the neural network calculation and creates an analytical and graphical report on the proportion of customers who came to an office to purchase a banking product.

  In addition, a recommender system is implemented based on the scikit-learn machine learning models.

  A voice assistant was created for the mobile application, which recognizes and executes a number of commands. During the development process, it mastered principles of NLP and word vectorization. The neural network was developed based on the TensorFlow library.

- **BID Tehnologies (part time)**

  12.2020-07.2023 - python-developer

  I was responsible for programming of industrial robots for various purposes. The development was carried out in Python. It is necessary for robotic manipulators to create a service for calculating the motion trajectory, speed and acceleration of electric motors. For this purpose, the library for calculating inverse knematics IKpy had been mastered and applied.

Other services (e.g. reading information from sensors, outputting readings to the interface) are implemented using isyncIO and multithreading technology. A control panel was implemented using a WEB interface based on the Flask framework and socket technology. The entire robot control service functioned on the RaspberryPi microcomputer, commands were sent to the control boards via the CAN bus.

In addition, software was developed to control a sorting robot, the purpose of which is to sort batteries into groups with subsequent processing. For this, a computer vision system based on a neural network (Keras, TensorFlow) and the OpenCV library was implemented.

Another robot with computer vision was created to determine the correct position of a workpiece on the conveyor and then stick a label to it. The main requirement of the customer was simplicity of implementation, for this purpose the OpenCV library was used to segment the image of the workpiece and correctly set the light.

The software of one of the latest robots was implemented using the ROS (Robot Operating System) framework, the basics of which I had learned during the development process.

- **Export Base (part time)**

  07.2020-12.2020 - python-developer

  I was developing a site parsing system to collect and store information about enterprises in Russia and the CIS. Direct collection (scraping) was carried out using the Scrapy framework, the data was systematized and stored in the database (MySQL). The system administration and management module based on the Django framework was implemented.

  The basic understanding of asynchronous work, interaction with the database, and the formation of SQL queries were mastered in the course of developing.

- **Freelance**

  10.2019-present - developer

  I create back-end services, telegram-bots using Python.
  Create some DS/ML-projects

Образование

- **Technical Physics**

  Rybinsk State Aviation Technological Academy named after P. A. Solovyov
  2007/2013

- **Переводчик в сфере профессиональной коммуникации**

  Rybinsk State Aviation Technological Academy named after P. A. Solovyov
  2013/2016

Обо мне

I have been learning developing on my own since 2017 by using online courses, books and training videos.

Passed online courses: JavaRush (java-developer), SkillFactory (python for data analysis, Machine Learning).

I easily learn the material, diligent, sociable, able to work in a team. The topic of machine learning, neural networks, computer vision, robotics is interesting.

In the shortest possible time I can master any technology.

The basic specialty is a design engineer (7 years).

I'm currently actively studying Android development.

Completed courses:
1) Java-developer (Java Rush https://javarush.com/);
2) Python for data analysis (Skill Factory https://skillfactory.ru/);
3) Introduction in Machine Learning (Skill Factory https://skillfactory.ru/);
4) Practical Machine Learning (Skill Factory https://skillfactory.ru/);
5) Data Science (Skill Factory https://skillfactory.ru/);

Some of my projets:

CV-application for gesture reading: https://www.youtube.com/watch?v=-UwxU-ie7pw&ab_channel=IvanVereshchagin

CV-application for counting the number of people:
https://www.youtube.com/watch?v=dGHOvIpipEc&ab_channel=IvanVereshchagin

battery collection robot: https://www.youtube.com/watch?v=Ex7zmC6aPWM&ab_channel=IvanVereshchagin

An application that demonstrates the operation of a gun based on a neural network:
https://www.youtube.com/watch?v=jOeVqCw0EhI&ab_channel=IvanVereshchagin

Robotic arm: https://www.youtube.com/shorts/mFI021PhpNs