

Maxim Gushchin, PhD

Ruby Developer

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SUMMARY

I'm an experienced **Ruby** developer with 6+ years of programming expertise, specializing in high-quality code, data processing automation, and **project management**. My portfolio includes web app development in **Ruby on Rails** and **Python web frameworks**. Several projects contributed to scientific research at ITMO University: covering light transmission calculations, image intensity analysis, and also project for automated city event tracking.

WORK EXPERIENCE

RUBY DEVELOPER (FULL-TIME)

May 2021 - Sep 2023

Locality Labs · United States · Remote

- Code contributions in Ruby and Ruby on Rails.
 - Created reusable modules and classes.
 - Participated in news platform development.
- Analyzed data in MySQL (**100'000-5'000'000** records).
- Reduced the average workload per task by **20%** through team management and code reviews.
- Organized and spearheaded data collection team:
 - Analyzed **60+** websites (avg. **10'000** records, **4** relationships);
 - Implemented unified data collection structure;
 - Assigned tasks to diverse developers;
 - Reduced development time within the team by **30%** through improved Ruby code workflow (modules, containers, patterns, logging).

Ruby Ruby on Rails Docker Git ActiveRecord DevOps RSpec Project Management
MySQL PostgreSQL Big Data Analytics JavaScript OOP

PYTHON BACK-END DEVELOPER (SELF-EMPLOYED)

Jun 2020 - Present

DavaiSNami · St Petersburg · Russia · Remote

Created a project that consists of a set of Python-based services, collectively automating event parsing, publication, and management in our city, resulting in a **90%** reduction in the time required on channel:

- A service automating the process of scraping and filtering from 2000 events to 100 events per day according to a specified data structure, with the ability to easily add new websites.
- A Django-based service for managing publications through an admin panel and providing an API for retrieval and processing of all information.
- A service for automated event publication on various platforms and social media.
- A service in the form of a Telegram bot for event search and reminders.

Python Django REST Framework Nginx Docker Django API Development PostgreSQL
System Architecture Design Bootstrap OOP JavaScript DevOps Back-End Web Development

SCIENTIFIC RESEARCHER AND PYTHON DEVELOPER (PART-TIME)

Sep 2016 - Aug 2022

ITMO University · St Petersburg · Russia · Hybrid

- Developed a web application that remains an integral tool within the laboratory, enabling precise calculations of light transmission through complex multilayer systems.
- Designed a web application for experimental analysis of structures with chemiluminescent elements and image-based response determination.
- Conducted various experiments in the fields of physics and chemistry.
- Collaborated closely with diverse scientific teams to support shared research objectives.

Python Mathematical Modeling NumPy Pandas Flask Data Analysis Statistical Data Analysis
Quantitative Research Nanotechnology Plasmonics

WORK EXPERIENCE

PYTHON BACK-END DEVELOPER (FREELANCEE)

Nov 2020 - Jun 2021

Crediblock · United States · Remote

- Developed and maintained back-end web applications using Python as part of the Crediblock.com portfolio of disruptive FinTech services, encompassing Information Systems & Technology, Software for Markets.
- Collaborated on projects involving the integration of front-end technologies, including jQuery, to create seamless user experiences and enhance application functionality.
- Designed and implemented robust APIs to facilitate data exchange and interoperability.

Python Flask Nginx JavaScript API Development Virtual Private Server (VPS) Django
DevOps PostgreSQL

RUBY DEVELOPER (PART-TIME)

Jul 2020 - Nov 2020

Fides · St Petersburg · Russia · Remote

Ruby on Rails RSpec PostgreSQL Ruby

RUBY DEVELOPER (PART-TIME)

Aug 2019 - May 2020

ARQUIVADO · Brazil · Remote

MongoDB Test Automation PostgreSQL Ruby Selenium telegram Api

EDUCATION

ITMO University, St. Petersburg,
Russia 2018 - 2022, – **PhD**

ITMO University, St. Petersburg,
Russia 2016 - 2018, – **Master**

NRU of Electronic Technology (MIET),
Zelenograd – Russia
2012 - 2016, – **Bachelor**

PROJECTS

DavaiSNami

Developed a project focused on managing event postings in a Telegram channel, which encompassed the following components:

- Web scraping and event parsing from various websites
- Implementation of management processes through Django API services
- Posting events to the channel
- Administration of events using a dedicated Django admin service
- Scheduled tasks for posting, parsing, and research of new events.

Skills: Django REST Framework · API Development · Django · JavaScript · Data Analysis · Project Management · PostgreSQL · Python · telegram Api

 github.com/DSNDjango  github.com/escraper  github.com/DavaiSNamiBot

Layer Transmittance

Developed a web application for calculating the transmission of light through various thin multilayer structures. The application, built with Flask, employed mathematical models, recursive methods, and libraries such as NumPy, Pandas, and Matplotlib. It was designed to address specific research needs in the ITMO University laboratory and continues to be in use.

Skills: Python · Mathematical Modeling · NumPy · Pandas · Flask · Data Analysis · Statistical Data Analysis · Quantitative Research · Nanotechnology · Plasmonics

 github.com/LayerTransmittance

ChemiAnalysis 1.0

The program "ChemiAnalysis 1.0" is a supplement to the Product "Chemiluminescent Sensor". The program allows to process chemiluminescent image and present the result in the form of a two-dimensional graph with profiles of chemiluminescence intensity of the reference sample (Channel 1) and the tested sample (Channel 2). The functional feature of the program is a fast and accurate analysis for the presence of excessive concentration of reactive oxygen species in the biological sample under study.

Skills: Python, Mathematical Modeling, NumPy, Flask, Plasmonics

 github.com/ProfileIntensityFlask