



# ILYA RUMYANTSEV

Freelance Automation Consultant and Developer

## SKILLS

### Technical Proficiency

Throughout my studies at Instituto Superior Técnico, I gained hands-on experience with **Pentaho's software** and **SQL Server Management Studio** for database management and optimization. I have a strong foundation in **SQL, C/C++, Java, and R**, and I frequently use **Python** for data processing, machine learning, and deep learning in my latest projects.

### Projects and Practical Experience

In my free time, I have developed various personal projects, showcased on my GitHub, that involve API integrations, data handling, and decision-making algorithms. Additionally, I am proficient in Excel, which I regularly use to streamline and automate tasks.

## CONTACTS

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## PROFILE

IT Consultant with strong theoretical skills and a passion for OpenSource software.

DevOps Engineer, specialized both in automation and in custom application development, experienced with large projects and heterogeneous infrastructures. The link between development and operations, comfortable in both.

Customer-oriented and structured method of working, focused on quality and maintainability. Highly motivated to work in a team, both comfortable in big companies as in small teams.

## EDUCATION

### 2009 - 2011

#### M. Sc. Physics.

Universität Bonn

Main thematic priority of those master studies was numerical time series analysis of non-linear dynamical systems. Besides data analysis and transformation, great importance was attached to fast algorithms and efficient software architecture.

In the master thesis a numerical approach for the detection of the direction of interaction was proposed. Analysis of this new approach was performed with the help computer simulations to find out its limits and to compare it to another commonly used approaches.

This numerical approach was highly optimised for cluster computing and implemented in c++ . For those purposes a distributed computing cluster had to be set up and administrated.

### 2006 - 2009

#### B. Sc. Physics.

Universität Bonn

The topic for the bachelor's thesis was 'Feshbach resonance'. A numerical application was built to calculate the diagrams.

## WORK EXPERIENCE

## DevOps/FullStack developer

### Research and Development

Sep 15 - NOW

A large IAM project required an intuitive interface for role-based access and rights management. At the same time, new workflows for role based access, life time and monitoring had to be established

- Creation of a web portal for role- and rights management
- Establishing a connection to the existing MicroFocus role solution
- Development of new role-based workflows and processes, as well as training and support
- Maintenance of existing infrastructure

#### Technologies include:

- Django for the roles- and rights management tool backend (backend is a REST interface)
- Angular for the easy frontend interaction
- HTML5/CSS3/Bootstrap3 for the frontend
- Ansible + Docker for 1-click deployments

#### Achievements include:

- A web based tool for an intuitive role assignment and administration
- Online overview of company structures, projects, etc
- Tools for role review, reporting and troubleshooting

## DevOps engineer

### Research and Development

Jan 15 - Sep 15

Responsible for infrastructure architecture with regard on the future development and tool selection in the field of identity and access management

- Selection of future-proof tools for a large infrastructure
- Infrastructure migration into a cloudstack cloud
- Quality assurance in terms of documentation
- Tool development for infrastructure overview
- Development of Ansible modules for client

#### Technologies include:

- Python for custom tool development
- Ansible for infrastructure migration and cloud configuration
- SLES12
- Django for Visualization

#### Achievements include:

- Ansible module for SLES12 System + Package registration
- Python tool for ACL-administration in cloud
- Fully automated migration of old systems into cloud with Ansible play-books/roles
- Django tool on LDAP - Schema Review

## **Systems Analyst** **Research and Development**

Mar 14 - Jan 15

Responsible for infrastructure architecture / automaton as well as custom tool development on a project for directory services and identity / access management in a large heterogeneous environment.

- Design and implementation of update and deployment process automaton
- Quality assurance by design of infrastructure monitoring, centralized logging solutions and documentation
- Customized tool creation for ldap operations
- Installation and maintenance of single sign on solutions
- Customer support in ldap / infrastructural / programming concerns

### **Technologies include:**

- Ansible for infrastructure automaton and configuration management
- Python for custom Tool development
- nxLog + rsyslog + graylog for logging infrastructure
- NOVELL eDirectory
- Shibboleth as identity Provider combined with ldap
- SLES11
- Git for configuration and documentation versioning

### **Achievements include:**

- Drastically accelerated ( 20x faster) the update process and improved its reliability by introduction of centralized configuration management
- Extended the python-ldap library with interfaces for simplified access and modification of LDAP-Objects and searches
- Introduction of a complete and reliable centralized logging solution including log filtering and alerting for both windows and Linux systems

## **Systems Analyst** **Tourism industry**

Sep 13 - Mar 14

Responsible for data transformation and tool customization on a migration (legacy c++ code from Solaris to Linux systems) project. The tasks include

- Tool development for identification of critical spots in code
- Legacy code analysis

- Quality assurance
- Department-wide training in python
- Consulting in topics of migration to Git

#### **Technologies include:**

- Python
- Git
- Linux (Debian)

#### **Achievements include:**

- Implementing code coverage and dynamic code checker for c++ legacy source code based on gcov
- Introduction of Python + Environment in project

### **Systems Analyst**

Oct 12 - Sep 13

#### **Tourism industry**

Responsible for the infrastructure including performance and quality assurance on a large social media project.

- Organization and care of a cloud network (Debian systems)
- Support for software developers
- Configuration of open source tools for code quality and documentation
- Implementation of performance checks
- Implementation of automated reports on code quality and performance

#### **Technologies include:**

- Python + Django for tool development
- Sonar as static and dynamic tool for code analysis
- OpenLDAP for user rights management
- JIRA as the issue tracking/SCRUM tool

#### **Achievements include:**

- Customized wiki and documentation application for developers with Jenkins and Git integration
- Django web application to test the product performance using selenium tests in background with customizable tests / test environments and a graphical evaluation using the jqPlot library (also Javascript / jQuery)
- Improvement of the overall code quality by raising test coverage (+ 30%) and identification + elimination of potential code flaws

Large public service project with the goal to establish a platform for handling of finance processes with a very high number of transactions. Main focus was the migration of legacy data, by assuring data quality and transformation into various formats

- Customer consulting with regard to loading / unloading interfaces
- Definition of requirements for transformation of legacy data
- Implementation of algorithms for data transformation
- Tool development for secure data transport
- Tool development for tests of data quality/interface implementation

**Technologies include:**

- Standard Linux tools, such as awk, sed, grep, ...
- Python for in-depth data analysis
- Java for transport layers
- IBM DataStage

**Achievements include:**

- Definition of uniform standards
- Introduction of the standard Linux stack as global toolset for data analysis in project