



# Florin - Nicolae **Balate**

SENIOR SOFTWARE ENGINEER

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## Education

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### UPB ("Politehnica" University of Bucharest)

GRADUATE OF AUTOMATIC CONTROL AND COMPUTERS FACULTY

Bucharest, Romania

2000 - 2005

### "Grigori Moisil" Computer Science College

BACHELOR'S DEGREE

Brasov, Romania

1996 - 2000

## Skills

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**Programming** C/C++, Python, .NET C#, Go, Rust, JAVA

**DevOps** Linux, Docker, AWS

**Languages** Romanian, English

## Experience

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### UP AND RUNNING SOFTWARE INC. Iași

Remote from Brasov, Romania

SENIOR SOFTWARE DEVELOPER FREELANCER

Aug. 2023 - Present

- Project **VTrips.com**: responsible for backend development tasks, focusing on data synchronization and integration across multiple platforms.
- Data Synchronization: Developed and maintained systems to synchronize data between multiple platforms used by the client, utilizing .NET technologies and Entity Framework to ensure data consistency and integrity.
- AWS Data Lake Implementation: Played a pivotal role in designing and implementing a centralized data lake on AWS, facilitating efficient data storage and retrieval.
- ETL Processes with PySpark: Created and managed ETL (Extract, Transform, Load) scripts using Python and PySpark within AWS Glue and Amazon EMR, processing and integrating data from multiple sources into the data lake.
- Data Pipeline Optimization: Optimized data pipelines for performance and scalability, leveraging AWS services to handle large volumes of data effectively.
- Project **Valdi.ai**: worked on an innovative platform focused on distributed machine learning infrastructure.
- Contributed to the development and evolution of a system enabling customers to run ML models on distributed resources, both on Valdi's and clients' infrastructure.
- Supported the transition to a novel architecture where customer-provided compute power could be shared and utilized via Docker containers.
- Involved in Python development, as well as testing and debugging complex distributed Docker-based environments.

### RND SOFTWARE DEV S.R.L. Bucharest

Remote from Brasov, Romania

SENIOR SOFTWARE DEVELOPER FREELANCER

May. 2019 - Aug. 2023

- Responsible for developing and maintaining several components of a complete Internet Filtering Solution
- User Interface application developed using .NET and WPF technologies
- Complex Windows Service written in C++, that communicates with the filtering server and the UI
- Middleware Linux daemon that is responsible for parsing lots of configuration files and keeping a database up-to-date, written in Golang

### UP AND RUNNING SOFTWARE INC. Iași

Remote from Brasov, Romania

SENIOR SOFTWARE DEVELOPER FREELANCER

Jul. 2018 - Nov. 2020

- Contributor to a very interesting project that blends Artificial Intelligence with Blockchain technology.
- The code base is open to the public on GitHub and it has parts written in C++, functional tests involve some Python code and the UI uses Qt. (projectpai.com)

### SIEMENS INDUSTRY SOFTWARE

Brasov, Romania

SENIOR SOFTWARE DEVELOPER

Nov. 2008 - Feb. 2019

- Responsible for developing and maintaining a complex application which manages data acquisition and data processing
- The application, named Test.Lab, is used world wide by important companies from automotive, defense, aviation, energy industry sectors
- The application is developed under Windows operation system, using C++/C# technologies. For automation tests purposes Visual Basic and C# technologies are being used

## **IP DEVEL S.R.L. (PART OF ENEA)**

Bucharest, Romania

### SOFTWARE DEVELOPER

Mar. 2007 - Nov. 2008

- Embedded Developer for IP cameras from AXIS Communications Sweden. Bug fixes for existent features, maintainance and new firmware releases
- Linux Ethernet-GSM router (developer) - Architected and implemented a complete software package for a Ethernet-GSM router running Linux
- The router featured on demand dial-out, dial-in, NAT, dynamic DNS, DNS proxy, VPN, SMS and E-mail based notification and management and a web-based interface with restricted access
- The challenge in this project was to develop a complete software suite to cover all product requirements and ready for enduser interaction
- Skills used: Linux, networking, PXA255 (ARM V5TE based processor), PPP, TCP/IP, PHP, modem control

## **RVA LABS S.R.L. (PART OF ISCAN ROBOTICS ISRAEL)**

Bucharest, Romania

### SOFTWARE DEVELOPER

Aug. 2005 - Mar. 2007

- Developed automation solutions for Glass Industry
- Added new features, maintained and commissioned the "Vision" system (written in C++). A system used for error detection on passing glass plates on the production line
- Involved in four such Vision projects: two in France and two in Romania for Saint Gobain Glass
- Planned, designed, developed and tested a new computer vision system, written in Delphi/C++, aimed for the detection of the glass ribbon edges and roller marks (resulting from production)

## **CNDPI ROMSOFT S.A.**

Bucharest, Romania

### NETWORK / SYSTEM ADMINISTRATOR

Mar. 2004 - Aug. 2005

- Maintained a Windows based domain through Active Directory Console and its servers: Domain Controllers, DNS, DHCP, SQL Server, Windows Update Server
- Implemented and managed domain policies

## **SIMCO INTERNATIONAL S.R.L.**

Bucharest, Romania

### JUNIOR SOFTWARE DEVELOPER

Feb. 2002, Jan. 2004

- Provided software solutions for the Oil Industry
- Developed a client-server application: server written in C running under Linux platform accepting TCP connection from multiple clients, written in Delphi running under Windows platform. The clients provide input data and request the server to perform calculations ([www.petroclient.com](http://www.petroclient.com))
- Assisted development and tested parts of the web based application [www.wellhub.com](http://www.wellhub.com)
- Developed a client application (in Visual C++ 6.0) for data aquisition and calibration of a "well" monitoring server
- Implemented a Visual C++ application for data aquisition and storage in different database formats, real time data visualization

## **Extracurricular Activity**

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### **Team ORKG (Open Research Knowledge Graph)**

Online

#### PARTICIPANT IN #EUvsVIRUS HACKATHON

April 2020

- Proposed an idea to create a mood-based display for listing research papers
- Implemented the idea using a Jupyter Notebook to color large amounts of data based on assay method and detection instrument

## **Presentation**

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### **SummerSchool by Siemens PLM**

Brasov, Romania

#### PRESENTER FOR <API DESIGN> AND <LOGGING & PROFILING> LESSONS

Sep. 2014

- Introduced a couple of key concepts and considerations of API Design
- Organized a hands-on workshop with the students