Alexandru Cristian Gheorghiță

WORK EXPERIENCE

01/04/2014 – CURRENT Bucharest, Romania
RESEARCHER INSTITUTUL NAȚIONAL DE CERCETARE ÎN INFORMATICĂ – ICI BUCUREȘTI

- Research and Development
- Project Management
- Development of various applications necessary for the functioning of the .ro domain system (ROTLD) in Python and PHP languages
- Development of RESTful web services as well as their associated user interfaces
- Performing quality control on the source code developed by team members

01/05/2010 – 06/04/2012 Bucharest, Romania
PROGRAMATOR INNERES AUGE CO.

- Development of games for mobile platforms using the Unity game engine
- Porting games from the iOS platform to the Android platform

EDUCATION AND TRAINING

2017 – CURRENT Bucuresti, Romania
PHD Universitatea Politehnica din Bucuresti

Website https://upb.ro/

2019
CERTIFIED ETHICAL HACKER V10

2014 – 2016 București, Romania
MASTER'S DEGREE - SECURITY OF COMPLEX COMPUTER NETWORKS Univeristatea Politehnica din București

Teză de masterat:
"Tehnologii și Sisteme de Comunicații în Future Internet, Aplicații de Gaming", 2016

Competențe generale:
- auditarea securității rețelelor si a aplicațiilor
- securizarea avansată a serviciilor ISP
- dezvoltarea aplicațiilor WEB securizate
- algoritmi de criptare/decriptare
- dezvoltarea rețelelor oportuniste și mesh networks

Website https://upb.ro

2010 – 2013 București, Romania
BACHELOR'S DEGREE - COMPUTER SCIENCE Universitatea Titu Maiorescu

Teză de licență:
"Social Networking Implementat în iOS", 2013
Competențe dobândite:
- Programare C/C++ și Java
- Baze de date relaționale (MySQL, MSSQL, PostgreSQL)
- Algoritmi de programare

2008 – 2012 București, Romania
BACHELOR'S DEGREE - LAW Universitatea Dimitrie Cantemir

2004 – 2008 București, Romania
HIGH SCHOOL DIPLOMA Colegiul Național de Informatică Tudor Vianu

LANGUAGE SKILLS

Mother tongue(s):   **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1
FRENCH	B1	B1	B1	B1	A1
GERMAN	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Automation (Ansible, Salt, Chef, Puppet) │ FrontEnd Development │ Backend Developement │ Good understanding of Docker │ Good understanding of Blockchain │ Linux (Command line, user level and os knowledge)

Programming Languages

Go - Intermediary Level │ Expert Python Programming │ JavaScript / TypeScript (expert) │ Java - Intermediary Level │ C# - Intermediary Level │ Good programming skills (C, Python, Java, C++)

Databases

MySQL (Advanced) │ MongoDB (Advanced) │ Postgresql (advanced) │ Clickhouse (Intermediary)

PROJECTS

rotld.ro website

https://rotld.ro
Development of the graphic and functional aspects of the presentation website for the Romanian .ro Domain Registry.

Frontend of the indicator registration system.

http://indicatori.comunicatii.gov.ro/#/ro

Activities within the project:
 • I created the design for the system administration panel.
 • I developed the frontend system.
 • I developed the connection interface to the backend system (REST API).
Technologies used:
 • JavaScript
 • AngularJS
 • Node.js
 • Express.js

Automated system for processing customer requests for RoTLD.

System for automatically processing requests of the following types:
 • Request to reset email address
 • Request to transfer a domain from one registrar to another
 • Request to change the domain owner's name
Activities within the project:
 • I developed the system architecture.
 • I developed the component systems, both backend and frontend.
 • I implemented an automated testing system for the components.
Technologies used:
 • Backend: Python - Flask, MySQL

- Frontend: HTML, CSS, jQuery
- Continuous Integration: Jenkins

Accounting system for the RoTLD department.

Activities within the project:
- I participated in developing the system architecture together with the system architects team.
- I participated in developing the backend system alongside the development team.
- I created the architecture for the frontend system.
- I coordinated the development of the frontend system.

Technologies used:
- Backend: Python - Django, Celery, PostgreSQL, ClickHouse
- Frontend: JavaScript - ReactJS, Redux

IP Management System.

CRM IP Management System

Activities within the project:
- I developed the system architecture.
- I developed the component systems, both backend and frontend.
- I implemented an automated testing system for the components.
- I implemented a container solution (Docker) to simplify the development and production deployment stages.

Technologies used:
- Backend: Python - Django, PostgreSQL, Nginx
- Frontend: JavaScript - ReactJS
- Continuous Integration: Jenkins, Docker

Automated system for processing large volumes of data for the RoTLD department.

Automated system for processing large volumes of data (registration, transfer, deletion of domains, etc.)

Activities within the project:
- I developed the system architecture.
- I developed the system.

Technologies used:
- Python
- Go
- ActiveMQ
- PostgreSQL

Integrated Digital Platform PDI Timiș County Council.

Development of a UX/UI study and participation in the platform architecture development.

Digital Platform Timiș County Council 2.

Activities within the project:
- I developed the UX/UI study for the project.
- I participated in developing the platform architecture.
- I participated in developing the platform modules.

Technologies used:
- NestJS
- PostgreSQL
- MongoDB
- React

● ACTIVITATI STIINTIFICE

Publications

Bogdan-Ionuț PAHONȚU, Diana-Andreea ARSENE, Alexandru PREDESCU, Mariana MOCANU, Alexandru GHEORGHIȚĂ, Blockchain-based Decision Support System for Water Management, Studies in Informatics and Control, ISSN 1220-1766, vol. 32(3), pp. 131-140, 2023. https://doi.org/10.24846/v32i3y202312
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Carmen Ionela ROTUNĂ, Alexandru GHEORGHIȚĂ, Ionut SANDU, Mihail DUMITRACHE, Meda UDROIU, Dragoș SMADA - "A Generic Architecture for Building a Domain Name Reputation System", Studies in Informatics and Control, ISSN 1220-1766, vol. 32(2), pp. 39-49, 2023. https://doi.org/10.24846/v32i2y202304, WOS: 001031061400004

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Mihail DUMITRACHE1, Ionuț-Eugen SANDU, Adriana-Meda UDROIU, Cristian-Alexandru GHEORGHIȚĂ - "Considerații teoretice privind stabilirea reputației unui domeniu Internet ", Revista Romana de Informatica si Automatica, Vol. 33, No. 1, 81-92, 2023

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AC GHEORGHITA, I PETRE - "Securely Driving IoT by Integrating AIOps and Blockchain", Romanian Cyber Security Journal, 2020

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Radu BONCEA, Ionuț PETRE, Victor VEVERA, Alexandru GHEORGHITA - " The 15th International Scientific Conference eLearning and Software for Education Bucharest", April 11-12, 2019

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R Boncea, I Petre, V Vevera, A Gheorghita - "Machine Learning Based Methods Used for Improving Scholar Performance", The International Scientific Conference eLearning and Software for Education, 2019

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C Rotuna, A GHEORGHITA, A Zamfiroiu, D SMADA - "Smart City Ecosystem Using Blockchain Technology", Informatica Economica 23 (4), 2019

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C Rotuna, CE Cîrnu, D Smada, A Gheorghiță - "Smart city applications built on big data technologies and secure IOT", Ecoforum Journal 6 (3), 2017

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CI Rotuna, CE Cirnu, A Gheorghita- "Implementing smart city solutions: smart city map and city drop", Calitatea Vietii 28 (3), 313–327-313–327, 2017

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AC Gheorghita, M Anghel - "Serious Games: An Oxymoron?", International Conference on Virtual Learning - ICVL, 2016

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D. Banciu, I. Petre, D. Smada, A. Gheorghita - "Sistem de masurare si monitorizare a indicatorilor privind societatea informationala", Revista Romana de Informatica si Automatica, nr. 3/2016

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Alexandru C. Gheorghita , Ionu Sandu - "Analiza client Dropbox", Revista Romana de Informatica si Automatica, nr. 1/2015

Research activity

Core Program "Advanced Research Based on Emerging and Disruptive Technologies - Support for the Society of the Future," Objective: The Internet of the Future, Communications, Mobile Technologies; PN 2338 02 01 - "Architecture – Intelligent Monitoring Platform for Internet Domains through the Development of a Dynamic Reputation Assessment System (TLDRep)" - Project Team Member; Deliverable Contribution

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Core Program "Advanced Technologies and Services for the Development of the Information Society – TEHSIN," Objective: 01 – Advanced Technologies for e-Services; PN 09 23 01 10 – "Electronic Services Based on Cloud Computing Infrastructure" - Project Team Member; Deliverable Contribution

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Core Program "Methods for Analyzing the Impact of Social Media on Governance Processes"; PN 09 23 06 01 – "Electronic Services Based on Cloud Computing Infrastructure" – Project Team Member; Deliverable Contribution

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Sectoral Program "Methods for Analyzing the Impact of Social Media on Governance Processes"; 145/2015 – "Proposals for Solutions in Implementing the European Interoperability Framework at the National Level – Examples of Good Practices from EU Member States" – Project Team Member; Deliverable Contribution

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PN.802 - Expansion of Services Provided by the Online Platform for Evaluating Technical-Scientific Literature

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Online e-Participation System for Smart City Project Initiatives, PN 603

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Study on Adaptive Systems for Early Recognition of Cyber Attacks on State Resources - CS 76/19.06.2018

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New Research in Modeling and Optimizing Complex Systems with Applications in Industry, Business Environment, and Cloud Computing - PN101/2018

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PN101/2019 - Research on Advanced Policies and Solutions for Securing Critical Infrastructures Against Cyber Attacks

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PN 301/2019 - Non-Invasive Monitoring and Evaluation System for the Health of Elderly People in an Intelligent Environment Ro - SmartAgeing