



# Barina Gabriel

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## ● WORK EXPERIENCE

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14/10/2019 – CURRENT – Timisoara, Romania

### **SOFTWARE ENGINEER – 3Pillar Global**

I am part of the core developer team for Faculty Lifecycle Management (FLM), a platform that offers holistic support for faculties in order to keep track of staff, their current ranks and professional journeys for their career development.

#### **Main assignments:**

- implement new features
- requirement analysis, development, and testing

#### **Main programming languages, tools, IDE's and techniques used:**

- Ruby (Rails)
- Angular
- HTML
- CSS
- MySQL
- Git
- RubyMine
- Unit and Integration Testing
- Continuous Integration
- Agile software development

27/02/2017 – 11/10/2019

### **SOFTWARE ENGINEER – Interact**

I created from scratch several in-house tools for Continental's Tiretech division, as well as one of the biggest non-profit organization from the US - Kingsbridge Heights Community Center -, offering services for thousands of participants from birth to late adulthood.

#### **Main assignments:**

- create custom websites based on specifications and design
- requirement analysis, development and testing

#### **Main programming languages, tools, IDE's and techniques used:**

- PHP (Laravel)
- JavaScript (Vue.js)
- HTML

- CSS
- MySQL
- Git
- PhpStorm
- npm

Timisoara, Romania

07/09/2016 – 24/02/2017

### **SOFTWARE ENGINEER – Auximus**

I worked for an international pharmaceutical company in order to maintain their portal; it is used actively (and heavily) throughout Europe thanks to 5 local e-commerce sites, offering a turnover of 18 million euros.

#### **Main assignments:**

- implement new features
- refactoring old (legacy) code
- requirement analysis, development, and testing

#### **Main programming languages, tools, IDE's and techniques used:**

- PHP
- JavaScript
- HTML
- CSS
- MySQL
- Git
- PhpStorm
- Unit and Integration Testing
- Continuous Integration
- Agile software development

Timisoara, Romania

21/07/2014 – 31/08/2016

### **SOFTWARE ENGINEER – SoftVision**

Switching from PHP to Ruby, I was part of a team developing web-applications and payment interfaces for medical practices. I started working on interfacing the application with POS terminals and the EMV payment method via a custom API, but ended up focusing more on the application itself.

Throughout the years, I had the opportunity to interact with our clients on a weekly basis (in order to give and receive feedback) and was exposed to requirement analysis and preliminary testing as well.

#### **Main assignments:**

- back-, and front-end development
- requirement analysis
- solution guidance

#### **Main programming languages, tools, IDE's and techniques used:**

- Ruby (Ruby on Rails)
- JavaScript (AngularJS)

- HTML
- CSS
- MySQL
- Git
- Unit and Integration Tests
- Continuous Integration
- Agile software development

Timisoara, Romania

04/03/2011 – 18/07/2014

## **SOFTWARE ENGINEER – Reflection Media**

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Soon after joining a team of passionate developers, I was put in charge of developing and maintaining a new plugin for WordPress, which turned out to be very profitable.

Throughout the years, I had the opportunity to fulfill several key-positions, and gather valuable knowledge and experience pertaining the full life-cycle of a project.

### **Main assignments:**

- back-, and front-end development of custom sites and plugins for WordPress
- market research for an in-house product, requirement analysis, project planning, development, testing, quality assurance and support
- constant interactions with clients all around the world for all of the above stages

### **Main programming languages, tools, IDE's and techniques used:**

- PHP (WordPress)
- JavaScript
- HTML
- CSS
- MySQL
- Git
- Tortoise SVN
- PhpStorm
- Paymo
- Oracle VirtualBox
- Photoshop
- MS Office
- Agile software development

Timisoara, Romania

08/2009 – 09/2010

## **COMPUTER SYSTEM ADMINISTRATOR ASSISTANT – "Bartok Bela" Theoretical Highschool**

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I was tasked with helping staff (IT teachers) in re-doing the local intra-net from scratch (cable-layout planning, patching UTP cables and configuring the client PC's throughout the school), as well as well as maintaining the computers for daily usage.

Timisoara, Romania

## ● EDUCATION AND TRAINING

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15/09/2014 – CURRENT – Timisoara, Romania

### **Doctor in Philosophy in Computer Science – "Politehnica" University of Timișoara**

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#### **Research:**

- real-world socio-economic simulator

#### **Teaching:**

- teaching-assistant for a multitude of subjects

#### **Educational results:**

- PhD thesis: Computational Analysis of Emergent Behaviour in Collaboration Networks
- 2 scientific reports written
- 6 scientific papers written (conferences and journals)

EQF level 8

21/09/2012 – 21/06/2014 – Timisoara, Romania

### **Master in Computer Science – "Politehnica" University of Timișoara**

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#### **General:**

- computer science
- social network analysis

#### **Occupational:**

- hardware and software faults testing
- computer systems testing
- advanced embedded systems development and testing
- advanced programming techniques
- social network analysis in computer science
- advanced artificial intelligence

#### **Educational results:**

- ranked top 10 of my year
- 2 scientific papers written

EQF level 7

## **Bachelor in Computer Science and Engineering – "Politehnica" University of Timișoara**

### **General:**

- computer science and technology
- English and German languages
- physical education and sports

### **Occupational:**

- project management
- electrical and electronic engineering
- artificial intelligence
- object-oriented programming
- software development and analysis
- software and computer engineering
- database management systems
- embedded systems development
- digital telecommunications
- operating systems
- multimedia systems
- mathematics
- science
- mechanics
- micro-economy
- management
- marketing

### **Educational results:**

- author of one of the best-ranked (content and presentation) bachelor's thesis (based on post-examination rankings)

EQF level 6

## **Secondary School Baccalaureate Diploma – "Bartok Bela" Theoretical High-school**

Besides the traditional subjects, the following were considered intensive: software programming, English and mathematics

EQF level 6

## ● **LANGUAGE SKILLS**

Mother tongue(s): **ROMANIAN** | **HUNGARIAN**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C2	C2	C2	C2	C2
<b>GERMAN</b>	C2	C1	B1	B1	B1

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

## ● DRIVING LICENCE

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Driving Licence: **AM**

Driving Licence: **B1**

Driving Licence: **B**

## ● ORGANISATIONAL SKILLS

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### Organisational skills

- good team-leading skills gained as lead-developer at Reflection Media
- good task-planning and estimation skills
- organizational skills obtained via various courses, tutorials and media resources (e.g. books).

## ● COMMUNICATION AND INTERPERSONAL SKILLS

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### Communication and interpersonal skills

Obtained at:

- former work-places, where client-interaction was required in order to create a bug-free, easy-to-use software application based on the clients needs
- mentoring various local meet-ups and IT schools
- teaching students a multitude of subjects
- speaking at international conferences

## ● JOB-RELATED SKILLS

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### Job-related skills

- during the years I was exposed to various phases of the software development life cycle, including requirement analysis, customization, data integration, deployment, technical documentation, quality assurance, customer interaction and much more
- (software) project management: project and resource planning and assignment
- very good skills when it comes to collaborative work (via repositories, e.g. Git)
- team-player, proactive and with a positive attitude
- mentoring skills obtained via various courses (both participating and organizing)

## ● PUBLICATIONS

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### **From Elusive to Ubiquitous: Understanding Smart Cities**

Barina, A., Barina, G.

2020

*19th International Conference on Informatics and Economy.*

### **Agent-based simulations of payoff distribution in economic networks**

Barina, G., Udrescu, M., Barina, A., Topirceanu, A., & Vladutiu, M.

2019

*Social Network Analysis and Mining*, vol. 9, no. 1, p. 63, December 2019 (Accession Number: WOS:000492592200001, ISSN: 1869-5450)

### **Simulating payoff distribution in networks of economic agents**

Barina, G., Udrescu, M., Topirceanu, A., & Vladutiu, M.

2018

*IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, IEEE, pp. 467-470, August, 2018 (Accession Number: WOS:000455640600076, ISBN:978-1-5386-6051-5)

### **Simulating trade in economic networks with TrEcSim**

Barina, G., Sicoe, C., Udrescu, M., & Vladutiu, M.

2017

*European Network Intelligence Conference*, Springer, Cham, pp. 169-185, September 2017 (Accession Number: WOS:000507984600012, ISBN:978-3-319-90312-5; 978-3-319-90311-8)

### **Musenet: Collaboration in the music artists industry**

Topirceanu, A., Barina, G., & Udrescu, M.

2014

*European Network Intelligence Conference*, IEEE, pp. 89-94, September 2014 (Accession Number: WOS:000361480100014, ISBN:978-1-4799-6914-2E)

### **MuSeNet: Natural patterns in the music artists industry**

Barina, G., Topirceanu, A., & Udrescu, M.

2014

*9th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI)*, IEEE, pp. 317-322, May 2014 (Accession Number: WOS:000343400600055, ISBN: 978-1-4799-4694-5)