



Radu Trusca

WORK EXPERIENCE

ROBERT BOSCH S.R.L. – CLUJ-NAPOCA, ROMANIA

SOFTWARE ARCHITECT & SCRUM MASTER – 17 OCT 2022 – CURRENT

Software Architect

- Collaborating with stakeholders to translate customer requirements into technical solutions;
- Creating detailed architecture diagrams and documentation for embedded systems;
- Defining and implementing technical standards, guidelines, and best practices for the whole project architecture;
- Performing software safety analysis;

Scrum Master (1 year experience)

- Facilitating daily stand-ups, sprint planning, reviews, and retrospectives;
- Removing impediments and ensuring smooth progress of sprint goals;
- Monitoring team performance and promoting continuous improvement;
- Tracking metrics such as velocity and burn-down charts to optimize workflow;
- Supporting product owner in refining and prioritizing the product backlog.

MARELLI CLUJ ROMANIA S.R.L. – CLUJ-NAPOCA, ROMANIA

SOFTWARE ARCHITECT – 23 JUL 2018 – 9 OCT 2022

- Analyzed System Requirements and System Architecture, deriving Software Requirements, and modelling Software Architecture (Static and Dynamic Diagrams, Deployment Diagrams, Detailed Design);
- Held Software Architecture Design trainings to different software teams;
- Estimated development efforts in a Change Control Board;
- Participated in audits, where I presented the Software Architecture and its related work products;
- Periodically reviewed the match between software architecture and source code;
- Monitored KPIs, such as code static analysis reports and architecture maturity dashboard.

EDUCATION AND TRAINING

OCT 2019 – CURRENT Romania

PH.D. Faculty of Mathematics and Computer Science, Babeş-Bolyai University

Website <https://www.cs.ubbcluj.ro/> | **Field of study** Nonlinear Operators and Differential Equations | **Level in EQF** EQF level 8

OCT 2017 – JUL 2019 Cluj-Napoca, Romania

MASTER'S DEGREE Faculty of Mathematics and Computer Science, Babeş-Bolyai University

Website <https://www.cs.ubbcluj.ro/> | **Field of study** Advanced Mathematics | **Level in EQF** EQF level 7 |

Thesis Generalizations of the Banach-Caccioppoli Contraction Principle. Local Fixed Point Theorems

OCT 2014 – JUL 2017 Cluj-Napoca, Romania

BACHELOR'S DEGREE Faculty of Mathematics and Computer Science, Babeş-Bolyai University

Website <https://www.cs.ubbcluj.ro/> | **Field of study** Mathematics and Computer Science | **Level in EQF** EQF level 6 |

Thesis The Study of the Dynamical Behaviors of Linear Differential Equations Systems

SEP 2010 – JUN 2014 Râmnicu Vâlcea, Romania

BACCALAUREATE DEGREE C.N.I. Matei Basarab

Field of study Mathematics and Computer Science | **Level in EQF** EQF level 4

● PUBLICATIONS

2025

Fixed point and stability results for multi-valued nonlinear graph contractions in complete metric spaces

M. Moga, R. Trușcă, Fixed point and stability results for multi-valued nonlinear graph contractions in complete metric spaces. *J Anal* 33, 717–742 (2025). <https://doi.org/10.1007/s41478-024-00858-6>

2024

On some fixed point theorems for Ćirić operators

Moga, Mădălina and Trușcă, Radu (2024) On some fixed point theorems for Ćirić operators. *Miskolc Mathematical Notes*, 25 (2). pp. 871-885. ISSN 1787-2413

2022

Some local fixed point theorems for generalized multivalued contractions with applications

A. Petrușel, R. Trușcă, J.-C. Yao, *Some local fixed point theorems for generalized multivalued contractions with applications*. *J. Nonlinear Convex Anal.* **23** (2022), no. 12, 2835-2845.

2021

Some local fixed point theorems and applications to open mapping principles and continuation results

R. Trușcă, *Some local fixed point theorems and applications to open mapping principles and continuation results*, *Arab. J. Math.* **10** (2021), 711-723 DOI [10.1007/s40065-021-00331-3](https://doi.org/10.1007/s40065-021-00331-3).

2021

Local fixed point theorems and open mapping principles for generalized contractions

R. Trușcă, *Local fixed point theorems and open mapping principles for generalized contractions*, *Annales Univ. Sci. Budapest., Sect. Math.* **64** (2021), 215-223.

2019

Iterative Approximations for Non- Self Operators

A. Petrușel and R. Trușcă, *Iterative Approximations for Non-Self Operators*, 2019 21st International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Timisoara, Romania, 2019, 307-310.

● CONFERENCES AND SEMINARS

30 MAY 2024 – 31 MAY 2024 Cluj-Napoca, Romania

6th Romanian Itinerant Seminar on Mathematical Analysis and its Applications

Talk title: "Maia type theorems for some multi-valued generalized contractions"

11 JUL 2023 – 14 JUL 2023 Brașov, Romania

14th International Conference on Fixed Point Theory and its Applications

Talk title: "Fixed points for nonlinear graph contractions with applications"

12 SEP 2022 – 15 SEP 2022 Linz, Austria (online)

24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), Linz, Austria, September 12 - 15, 2022.

Talk title: "On some fixed point theorems for Ćirić operators"

15 SEP 2022 – 17 SEP 2022 Brașov, Romania

4th International Conference on Mathematics and Computer Science

Talk title: "Fixed point theory for multi-valued nonlinear graph contractions in complete metric spaces"

19 MAY 2022 – 21 MAY 2022 Braşov, Romania

4th Romanian Itinerant Seminar on Mathematical Analysis and its Applications

Talk title: "Some applications of local fixed point theorems for some generalized contractions"

7 DEC 2021 – 10 DEC 2021 Timişoara, Romania (online)

23rd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing

Talk title: "Local fixed point results and applications for multivalued generalized contractions"

12 SEP 2021 – 18 SEP 2021 Bedlewo, Poland

19th International Conference on Functional Equations and Inequalities

Talk title: "Fixed point theory for multi-valued nonlinear graph contractions in complete metric spaces"

1 OCT 2020 – 3 OCT 2020 Budapest, Hungary (online)

13th Joint Conference on Mathematics and Computer Science

Talk title: "Local fixed point theorems and open mapping principles for generalized contractions"

1 SEP 2020 – 4 SEP 2020 Timişoara, Romania

22nd International Symposium on Symbolic and Numeric Algorithms for Scientific Computing

Talk title: "Iterative approximations for local fixed point theorems and applications"

16 SEP 2024 – 19 SEP 2024 Timişoara, Romania (online)

26th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing

Talk title: "Fixed points for Feng-Liu multi-valued operators with an application"

SKILLS

Excellent

Sparx Systems Enterprise Architect | IBM Rational DOORS | Unified Modelling Language

Advanced

Git | LaTeX | C

Good

C++ | Embedded Systems | Python | SQL

Basic

JavaScript | Perl

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
GERMAN	A2	A2	A2	A2	A2
FRENCH	A2	A2	A2	A2	A2

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