



Diana Ioana Otrocol

Date of birth: 18/03/1975 | **Place of birth:** Sibiu, Romania | **Nationality:** Romanian | **Gender:** Female |

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Address: Observatorului 136, 400352, 12, A, 1, 400352, Cluj-Napoca, Romania (Home)

● WORK EXPERIENCE

COLEGIUL NAȚIONAL PEDAGOGIC "ANDREI ȘAGUNA" – SIBIU, ROMANIA

Address Aleea Turnu Roșu , Nr. 2, 550361, Sibiu, Romania

MATHEMATICS TEACHER AT SECONDARY SCHOOL – 01/09/1997 – 31/08/1998

- Teaching mathematics to secondary school students.
- Preparing lesson plans and educational materials.
- Assessing and evaluating students' progress.
- Organizing and supervising classroom activities.
- Supporting students in developing analytical and problem-solving skills.

COLEGIUL TEHNIC INDEPENDENȚA SIBIU – SIBIU, ROMANIA

Address Str. Gladiolelor, Nr. 2, Sibiu, Romania

MATHEMATICS TEACHER AT SECONDARY SCHOOL – 01/09/1998 – 31/08/2001

- Teaching mathematics to secondary school students.
- Preparing lesson plans and educational materials.
- Assessing and evaluating students' progress.
- Organizing and supervising classroom activities.
- Supporting students in developing analytical and problem-solving skills.

GRUP ȘCOLAR INDUSTRIAL CONSTRUCȚII DE MAȘINI SIBIU – SIBIU, ROMANIA

Address Str. Henri Coanda, Nr. 51, Sibiu, Romania

MATHEMATICS TEACHER AT SECONDARY SCHOOL – 01/09/2001 – 09/2002

- Teaching mathematics to secondary school students.
- Preparing lesson plans and educational materials.
- Assessing and evaluating students' progress.
- Organizing and supervising classroom activities.
- Supporting students in developing analytical and problem-solving skills.

BABES-BOLYAI UNIVERSITY, FACULTY OF MATHEMATICS AND COMPUTER SCIENCE – CLUJ NAPOCA, ROMANIA

Address Mihail Kogălniceanu Street, No. 1, RO-400084, Cluj Napoca, Romania

FULL-TIME PHD STUDENT IN MATHEMATICS – 01/10/2002 – 31/12/2005

- Conducting research in the field of mathematics.
- Preparing and presenting research papers and reports.
- Participating in academic seminars and conferences.
- Assisting in teaching undergraduate mathematics courses.
- Taught undergraduate seminar classes in mathematics.

TIBERIU POPOVICIU INSTITUTE OF NUMERICAL ANALYSIS, ROMANIAN ACADEMY – CLUJ NAPOCA, ROMANIA

Address Fântânele Street, No. 57, 400320, Cluj Napoca, Romania

RESEARCHER ASSISTANT – 01/01/2006 – 01/02/2011

- Collected, analyzed, and interpreted data.
- Prepared reports, presentations, and research documentation.
- Collaborated with senior researchers and academic staff.

IULIU HATIEGANU UNIVERSITY OF MEDICINE AND PHARMACY, CLUJ-NAPOCA – CLUJ NAPOCA, ROMANIA

Address Louis Pasteur Street, 4, 400349, Cluj Napoca, Romania

EXTERNAL TEACHING ASSOCIATE – 01/10/2011 – 31/08/2012

Taught and supervised seminar sessions for undergraduate mathematics courses

TIBERIU POPOVICIU INSTITUTE OF NUMERICAL ANALYSIS, ROMANIAN ACADEMY – CLUJ NAPOCA, ROMANIA

SCIENTIFIC RESEARCHER III – 01/05/2011 – CURRENT

1. Research and Development

2. Publication and Dissemination

- Writing and publishing scientific articles in journals and conference proceedings.
- Presenting research findings at national and international conferences.
- Participating in workshops, seminars, and research groups.

3. Collaboration and Coordination

- Collaborating with researchers
- Preparing research grant proposals and project documentation.

4. Evaluation and Monitoring

- Monitoring the progress of research projects.
- Evaluating results and preparing scientific reports.
- Reviewing articles for academic journals (peer review)

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ NAPOCA, ROMANIA

EXTERNAL TEACHING ASSOCIATE – 01/10/2016 – 31/08/2017

Taught and supervised seminar sessions for undergraduate mathematics courses

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ NAPOCA, ROMANIA

Address Memorandumului Street, 28, 400114, Cluj Napoca, Romania

ASSISTANT PROFESSOR – 01/10/2017 – 31/08/2023

Teaching activities:

- Delivering lectures and conducting seminars for undergraduate and graduate students.

Lectures: Mathematical Analysis, Linear Algebra and Analytical Geometry, Special Mathematics

Seminars: Mathematical Analysis, Linear Algebra and Analytical Geometry, (in Romanian and in English), Special Mathematics, Special Mathematics in Engineering (in Romanian and in English), Differential Equations

- Preparing course materials, assignments, and exams.
- Supervising and mentoring students in projects.
- Providing academic guidance and supporting students' learning and development.

Research activities:

- Designing and conducting research projects in mathematics.
- Collecting, analyzing, and interpreting data.
- Publishing research results in peer-reviewed journals and conference proceedings.
- Presenting communications at national and international conferences.
- Collaborating with colleagues and research teams on academic projects.
- Contributing to grant proposals and research funding applications.

FACULTY OF AUTOMATION AND COMPUTER SCIENCE, TECHNICAL UNIVERSITY OF CLUJ-NAPOCA – CLUJ NAPOCA, ROMANIA

ASSISTANT MANAGER – PROJECT ROSE (CAN!) – 12/2019 – 2023

- Assisted in managing the ROSE (Can!) project focused on education and career counseling.
- Contributed to strategies aimed at increasing first-year university student retention.
- Organized workshops, counseling sessions, and support activities for students.
- Coordinated with faculty members and project team to implement project objectives.

FACULTY OF AUTOMATION AND COMPUTER SCIENCE, TECHNICAL UNIVERSITY OF CLUJ NAPOCA – CLUJ NAPOCA, ROMANIA

EDUCATIONAL MARKETING EXPERT – 2020 – 2021

the project „Education and career counseling for increasing the retention rate in the first year of university studies” at the Faculty of Automation and Computer Science, Technical University of Cluj Napoca.
ROSE (Romania Secondary Education Project) - AG239/SGU/NC/II

- Provided expertise in curriculum design and educational programs.
- Advised on teaching methods, student assessment, and educational policies.
- Participated in educational projects, workshops, and teacher training initiatives.
- Contributed to the development and implementation of strategies for improving education quality.

■ TECHNICAL UNIVERSITY OF CLUJ NAPOCA, PROJECT NO. 99/SGU/CI/II DIN 17.12.2018 – CLUJ NAPOCA, ROMANIA **LEARNING EXPERT – 2019 – 2021**

- Designed and implemented learning programs and curricula.
- Provided guidance on teaching methods and instructional strategies.

■ TECHNICAL UNIVERSITY OF CLUJ NAPOCA – CLUJ NAPOCA, ROMANIA **SUPPORT LECTURES FOR STUDENTS FOR THE COMPETITION: "TRAIAN LALESCU'S STUDENTS MATHEMATICS COMPETITION" – 2019 – CURRENT**

- Assisted lectures and guided students participating in the "Traian Lalescu" Students Mathematics Competition.
- Provided mentorship and academic support to competition participants.
- Helped organize and coordinate training sessions and practice exercises.

EDUCATION AND TRAINING

01/10/1993 – 31/08/1997 Cluj-Napoca, Romania

BACHELOR'S DEGREE IN MATHEMATICS Babes-Bolyai University, Faculty of Mathematics and Computer Science

Address Mihail Kogalniceanu Street, No. 1, RO-400084 , Cluj-Napoca, Romania | **Website** <https://www.cs.ubbcluj.ro/> |

Field of study Education science

01/09/1998 – 31/08/1999 Cluj-Napoca, Romania

FULLY QUALIFIED TEACHER Babes-Bolyai University, Faculty of Mathematics and Computer Science

Website <https://www.cs.ubbcluj.ro/> | **Field of study** Education science

01/10/2001 – 31/12/2002 Sibiu, Romania

MASTER'S DEGREE IN MATHEMATICS AND APPLIED INFORMATICS Lucian Blaga University, Faculty of Sciences

Website <https://www.ulbsibiu.ro/ro/> | **Field of study** Education science

LANGUAGE SKILLS

Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	B2	B2	C1
FRENCH	B1	B1	B1	B1	B1

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

SKILLS

Managerial skills | Good communication skills | Teamwork | Adaptability | Creativity | Mathematical modeling | Academic writing | Statistical software (MAPLE, MATLAB) | Time management

CERTIFICATIONS

Technical University of Cluj-Napoca, Career Counseling and Guidance Center, 2019

Career Coaching for Young People

Promoting social inclusion and increasing access to technical higher education via career education programs

Mode of learning: Project based

CONFERENCES AND SEMINARS

Cluj-Napoca

Member of the local organizing committee of Conferences

- **Cluj Academic Days**, Cluj-Napoca, Romania, 2008
- **International Conference on Nonlinear Operators, Differential Equations and Applications**, 2004 and 2007, Cluj-Napoca Romania
- **The 16th International Conference on Applied Mathematics and Computer Science**, Cluj-Napoca, România, 3-6 July, 2019.
- Member of the local organizing committee of: "**The 13th Romanian - German Seminar on Approximation Theory and Its Applications**", Cluj-Napoca, România, 3-6 Iulie, 2019.

NETWORKS AND MEMBERSHIPS

Memberships / Professional Associations

- Member of the **Romanian Mathematical Society** (SSMR)
- Member of "**Theodor Angheluta Seminar**"
- Editorial secretary of the journal **Journal of Numerical Analysis and Approximation Theory** (Revue d'Analyse Numérique et de Théorie de l'Approximation) in the period 2013-2022
- Editorial secretary of the journal **Annals of the Tiberiu Popoviciu Seminar of Functional Equations, Approximation and Convexity**

PUBLICATIONS

2021

Ulam stability of a linear difference equation in locally convex spaces

Novac, D. Otrocol, D. Popa, Ulam stability of a linear difference equation in locally convex spaces, *Results Math.*, 76, 33 (2021).

Authors: Novac, D. Otrocol, D. Popa | **Journal Name:** *Results Math.*

2020

Solutions with a prescribed interval of positivity for differential systems with nonlocal conditions, *Appl. Math. Comput.* (ISSN: 0096-3003, IF: 4.397), 375 (2020), 15, 125092

- V. Ilea, A. Novac, D. Otrocol, R. Precup, Solutions with a prescribed interval of positivity for differential systems with nonlocal conditions, *Appl. Math. Comput.* (ISSN: 0096-3003, IF: 4.397), 375 (2020), 15, 125092

Authors: V. Ilea, A. Novac, D. Otrocol, R. Precup | **Journal Name:** *Appl. Math. Comput.*

2022

Applications of fibre contraction principle to some classes of functional integral equations

- V. Ilea, D. Otrocol, I.A. Rus, M.-A. Serban, Applications of fibre contraction principle to some classes of functional integral equations, *Fixed Point Theory* (ISSN: 1583-5022, IF: 1.396), 23 (2022) no. 1, 279-292

Authors: V. Ilea, D. Otrocol, I.A. Rus, M.-A. Serban | **Journal Name:** *Fixed Point Theory*

■ V. Ilea, D. Otrocol, On the Burton method of progressive contractions for Volterra integral equations, Fixed Point Theory (ISSN: 1583-5022, IF: 1.396), 21 (2020), No. 2, 585-594.

Journal Name: Fixed Point Theory

2018

An efficient step method for a system of differential equations with delay

D. Otrocol, M.-A. Serban, An efficient step method for a system of differential equations with delay, Journal of Applied Analysis and Computation (ISSN: 2156-907X, IF: 1.429), 8 (2018), No. 2, 498-508

Authors: D. Otrocol, M.-A. Serban

2014

Systems of functional-differential equations with maxima

D. Otrocol, Systems of functional-differential equations with maxima, of mixed type, Electron. J. Qual. Theory Differ. Equ. (ISSN: 1417-3875, IF: 1.316), 2014, No. 5, 1-9.

Authors: D. Otrocol | **Journal Name:** Electron. J. Qual. Theory Differ. Equ.

2013

Ulam stability for a delay differential equation

D. Otrocol, V.A. Ilea, Ulam stability for a delay differential equation, Central European Journal of Mathematics (ISSN: 1895-1074, IF: 0.489) 11(7) (2013), 1296-1303

Authors: D. Otrocol, V.A. Ilea | **Journal Name:** Central European Journal of Mathematics

2008

Functional-differential equations with “maxima” via weakly Picard operators theory

D. Otrocol, I. A. Rus, Functional-differential equations with “maxima” via weakly Picard operators theory, Bull. Math. Soc. Sci. Math. Roumanie (ISSN: 1220-3874, IF: 0.232), 51(99) (2008), No. 3, pp. 253-261

Authors: D. Otrocol, I. A. Rus | **Journal Name:** Bull. Math. Soc. Sci. Math. Roumanie

REVIEWER

2008 – CURRENT

Reviewer for scientific journals

- Mathematical Reviews
- Nonautonomous Dynamical Systems
- Demonstratio Mathematica
- Discrete and Continuous Dynamical Systems
- Fractal and fractionals
- Qualitative Theory of Dynamical Systems
- Mathematics
- Studia Universitatis Babes-Bolyai Mathematica
- Fixed Point Theory

Reviewed manuscripts submitted to peer-reviewed journals.

Provided constructive feedback to authors on methodology, results, and clarity.

Contributed to maintaining high standards in academic publishing.