

# Curriculum Vitae

## Personal data

**Last Name:** Ruff  
**First Name:** Laura-Ildikó  
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**Email:** [laura.ruff@ubbcluj.ro](mailto:laura.ruff@ubbcluj.ro), [laura@cs.ubbcluj.ro](mailto:laura@cs.ubbcluj.ro)  
**Date of Birth:** 15 November 1976  
**Civil Status:** married

## Education

**2000-2007:** PhD Student at the Faculty of Mathematics and Computer Science of “Babeş-Bolyai” University of Cluj-Napoca.

**2000-2001:** Advanced postgraduate studies, at the Faculty of Mathematics and Computer Science of “Babeş-Bolyai” University of Cluj-Napoca, Computer Science profile, Distributed Systems in Internet and Intranet specialization, full time studies.

**1996-2000:** The Faculty of Mathematics and Computer Science of “Babeş-Bolyai” University of Cluj-Napoca, Computer Science profile, Computer Science specialization.

**1991-1995:** Simion Barnutiu Theoretical Highschool, Şimleu Silvaniei maths-physics class

## Teaching

**2002-2007:** Teaching assistant at the Faculty of Mathematics and Computer Science of “Babeş-Bolyai” University of Cluj-Napoca.

- Teaching laboratories and seminars of Operating Systems and Computer Architecture (for computer science and mathematics-computer science students, hungarian and german groups)

**2007-present:** Lecturer at the same Faculty

- Teaching activities
  - 2007-2018 Web Programming and Distributed Operating Systems courses and Operating Systems laboratories and seminars
  - 2020-present Parallel and Distributed Programming course and Operating Systems laboratories and seminars



## Languages

- Hungarian (native)
- Romanian, English, German (advanced)
- French (understanding)

## PhD Thesis

Generation and verification of systolic algorithms

## Publications

- **Laura Szakács**, Anna Soós, Fraktáljelleg a zenében (Studiul caracterului fractal în muzică), Conferința Științifică Studențească din Transilvania (CSST), ediția a III-a, Cluj-Napoca, 2000
- **Laura Szakács**, *Different Approaches to Automatic Systolic Array Design*, Analele Universitatii din Timisoara, Seria Matematica – Informatica, XL, pp. 257-280, MIRTON Publisher, Timisoara, Roamnia, 2002, Special Issue on Computer Science - Proceedings of SYNASC02.
- **Laura Szakács**, *Automatic Design of Systolic Arrays: A Short Survey*, Technical report no. 02-27 in RISC Report Series, University of Linz, Austria. December 2002.
- **Laura SZAKACS**, Ioana CHIOREAN, *Automatic Derivation of a Systolic Algorithm for Sequences Comparison*, Analele Universitatii de Vest din Timisoara, Seria Matematica-Informatica, Volume XLI, pp 213-227 2003. Mirton Publisher, Timisoara, Romania, ISSN 1224-970X. special issue on Computer Science - Proceedings of SYNASC'03.
- Tudor Jebelean, **Laura Szakacs** Functional-Based Synthesis of Systolic Online Multipliers. SYNASC-05 (International Symposium on Symbolic and Numeric Scientific Computing), IEEE Computer Society, Editor: D. Zaharie, D. Petcu, V. Negru, T. Jebelean, G. Ciobanu, A. Cicortas, A. Abraham, M. Paprzycki , ISBN 0-7695-2453-2, dblp.uni-trier.de, COMPUTER SCIENCE BIBLIOGRAPHY, UNIVERSITAET TRIER, 2005, P. 267-275
- **Laura Ildiko Ruff**, Jebelean Tudor, *Functional-Based Synthesis of a Systolic Array for GCD Computation*, Science\_Citation\_Expanded, LECTURE NOTES IN COMPUTER SCIENCE, 4449, 2007, P.37 – 54
- **Laura Ruff**, Optimisation of Bidirectional Systolic Arrays with Sparse Input by “Folding”, Zentralblatt für Mathematik and Mathematical Reviews, <http://www.zentralblatt-math.org/zmath/en/journals/search/?an=00006719>, Annales Universitatis Scientiarum Budapestinensis de Rolando Eötvös Nominatae. Sectio Computatorica. Eötvös University, Budapest., 2009, P.217-233



- **Laura Ruff**, *Functional-Based Comparison between Two Special Classes of Uni- and Bidirectional Systolic Arrays*, SYNASC, International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timișoara, 26-29 September, IEEE computer society, Editor: Viorel Negru, Tudor Jebelean, Dana Petcu, Daniela Zaharie, 0-7695-3078-8, IEEE Xplore, INSPEC Accession Number: 9904781, Digital Object Identifier: 10.1109/SYNASC.2007.31, 2007, P. 51-58
- **Laura Ruff**, Systolic multiplication - comparing two automatic systolic array design methods, IO-port, Zentralblatt für Mathematik, AMS Digital Mathematics Registry, <http://www.zentralblatt-math.org/zmath/en/advanced/?q=an:pre05605534&format=complete>, Acta Universitatis Sapientiae. Informatica, 2009, P.235-258
- **Laura Ildiko Ruff**, *Optimisation of Bidirectional Systolic Arrays with Sparse Input by "Folding"*, Annales Universitatis Scientiarum Budapestinensis de Rolando Eötvös Nominatae. Sectio Computatorica. Eötvös University, Budapest., 2009, P.217-233

## International mobilities

- June 2001 – CEEPUS scholarship at the Johannes Kepler University Linz, Austria
- April 2002 – CEEPUS scholarship at the University of Szeged, Hungary
- July 2002 – guest researcher at the Research Institute for Symbolic Computation (RISC Linz, Austria) as a member in the CALCULEMUS project
- 1<sup>st</sup> March – 30<sup>th</sup> June 2004 – CEEPUS scholarship at the Johannes Kepler University Linz, Austria
- 1<sup>st</sup> March – 30<sup>th</sup> June 2005 – CEEPUS scholarship at the Johannes Kepler University Linz, Austria
- May 2006 – CEEPUS scholarship at the Alpen-Adria University Klagenfurt, Austria

## Other Information:

### Maternity leaves

- Feb. 2008 – June 2009
- March 2010 – Feb. 2012
- Oct. 2013 – Aug. 2015
- Oct. 2018 – Aug. 2020

Date: 11.11.2021.

