CURRICULUM VITAE

1. PERSONAL INFORMATION

NAME: Molnár

SURNAME: Andrea-Éva

DATE OF BIRTH: 16th September, 1986.

E-MAIL: andrea.molnar@math.ubbcluj.ro

andrea_molnar86@yahoo.com

2. EDUCATION

2013: Ph. D. in Mathematics, Faculty of Mathematics and Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania

TITLE OF PH. D. THESIS: Variational principles with applications

SCIENTIFIC ADVISOR: Prof. Dr. Csaba György Varga

2010: Master Degree, Didactic mathematics programme, Faculty of Mathematics and Computer Science, Babeș-Bolyai University, Cluj-Napoca, Romania

TITLE OF M.SC. THESIS: Variational principles and applications

SCIENTIFIC ADVISOR: Prof. Dr. Csaba György Varga

2008: Bachelor of Science Degree, Mathematics Computer Science programme, Faculty of Mathematics and Computer Science, Babeș-Bolyai University, Cluj-Napoca, Romania

TITLE OF B.SC. THESIS: Heap data structures

SCIENTIFIC ADVISOR: Lect. Dr. Klára Ionescu

3. WORKING EXPERIENCE

2015-present: Teaching assistant at Faculty of Mathematics and Computer Science, Babeș-Bolyai University, Cluj-Napoca, Romania

2013-2015: Associate lecturer at Faculty of Mathematics and Computer Science, Babeș-Bolyai University, Cluj-Napoca, Romania

2013-present: Associate lecturer at Faculty of Psychology and Educational Sciences, Department of Teacher Preparation, Babeș-Bolyai University, Cluj-Napoca, Romania

4. DOMAINS OF INTEREST

Calculus of variations

Databases

Didactics of Mathematics and Computer Science

Computer Assisted Teaching

5. RESEARCH, GRANTS

2015-present: Member of the Data Analysis research group

2011-2014: Member of the Geometric Analysis research group

2010-2011: project member, title: Nonsmooth Phenomena in Nonlinear Elliptic Problems (Fenomene nenetede în probleme neliniare eliptice), project code: PN2-IDEI-PCE-2008-2, Nr. 501, ID 2161, 2009-2011

6. PUBLISHED ARTICLES

I. Marchis, A. É. Molnár: *Research on how secondary school pupils do geometrical constructions*, Acta Didactica Napociensia, Vol. 2. (2009) No. 3, pp. 119-126.

M. Bota, A. É. Molnár, Cs. Varga: *On Ekeland's variational principle in b-metric spaces*, Fixed Point Theory, 12 (1) (2011), 21-28.

H. Lisei, A. É. Molnár, Cs. Varga: *On a class of inequality problems with lack of compactness*, Journal of Mathematical Analysis and Applications, 378 (2) (2011), 741-748.

A. É. Molnár: *A nonsmooth sublinear elliptic problem in R^N with perturbations*, Studia Universitatis Babeș-Bolyai Mathematica, 56 (1) (2012), 61-68.

Cs. Farkas, A. É. Molnár: *A Generalized Variational Principle and Its Application to Equilibrium Problems*, Journal of Optimization Theory and Applications 156 (2) (2013), 213-231

A. É. Molnár, O. Vas: *An existence result for a class of generalized hemivariational inequality systems*, Studia Universitatis Babeș-Bolyai Mathematica, 58 (3) (2013), 387–398.

Cs. Farkas, A. É. Molnár, Sz. Nagy: *A generalized variational principle in b-metric spaces*, Le Matematiche, 69 (2) (2014), 205-221.

I. I. Mezei, A. É. Molnár, O Vas: *Multiple symmetric solutions for some hemivariational inequalities*, Studia Universitatis Babeș-Bolyai Mathematica, 59 (3) (2014), 369-384.

7. GIVEN TALKS

Heap data structures, Transilvanian Student Conference on Science, Cluj-Napoca, 23th-24th May, 2008.

Study about the efficiency of interactive geometry applications in the learning and understanding of geometrical constructions, International Conference on Education „New ways and methods in teaching", Cluj-Napoca, 30th April – 2th May, 2010.

Variational principles and applications, Transilvanian Student Conference on Science, Cluj-Napoca, 14th-16th May, 2010.

Ekeland's variational principle in b-metric spaces, Deterministic and stochastic variational methods and applications – workshop, Martin-Luther University, Halle-Wittenberg, Germany, 7th – 20th November, 2010.

A generalized variational principle and applications to equilibrium problems in b-metric spaces, 9th Joint Conference on Mathematics and Computer Science, Siófok, Hungary, 9th -12th February, 2012.

Existence result for a class of generalized hemivariational inequality systems, Advances in Differential Equations: symmetrizations and related topics – workshop, Babeș-Bolyai University, Cluj-Napoca, 14th -15th March, 2013.

8. INTERNATIONAL COOPERATIONS

Research internship within the framework of the doctoral studies, Institute of Mathematics, University of Debrecen (Hungary), 1th February – 31th July 2012.

RESEARCH VISITS:

- Budapest, Hungary (Alfréd Rényi Institute of Mathematics), 1th -13th August, 2011.
- Debrecen, Hungary (University of Debrecen, Institute of Mathematics), 12th -20th November, 2011.

9. DIDACTICAL ACTIVITIES

- *Databases* (laboratories and seminars)
- *Transaction Management and Distributed Databases* (laboratories and seminars)
- *Mathematical foundations of computer science* (seminars)
- *Geometry* (seminars)
- *Geometry 1 (Analytical Geometry)* (seminars)
- *Geometry 3 (Curves and surfaces)* (seminars)
- *Designing educational software* (courses and laboratories)
- *Computer-assisted education* (courses and seminars)
- *Didactics of Computer Science* (courses and seminars)

10. SPOKEN LANGUAGES

HUNGARIAN: native speaker

ROMANIAN: fluent

ENGLISH: fluent