

# Curriculum Vitae

## **PERSONAL DATA**

**Name:** Mirjana Mikalački (maiden name: Rakić)  
**E-mail:** [mirjana.mikalacki@dmi.uns.ac.rs](mailto:mirjana.mikalacki@dmi.uns.ac.rs)

## **PROFESSIONAL EXPERIENCE**

- 2014 - Assistant Professor, University of Novi Sad, Faculty of Sciences, Department of Mathematics and Informatics
- 2009 - 2014 Research and Teaching Assistant at University of Novi Sad, Faculty of Sciences, Department of Mathematics and Informatics
- 2009 - Teacher of Informatics and Computer Science for talented children at “Jovan Jovanović - Zmaj” grammar school in Novi Sad
- 2007 - 2009 Junior Researcher and Teaching Assistant at University of Novi Sad, Faculty of Sciences, Department of Mathematics and Informatics

## **EDUCATION**

- 2014 Ph.D. in Computer Science, University of Novi Sad, Faculty of Sciences, Department of Mathematics and Informatics (advisor – prof. Miloš Stojaković)
- 2007 B. Sc. in Computer Science (Graduate thesis in the field of Computer Graphics), University of Novi Sad, Faculty of Sciences, Department of Mathematics and Informatics, GPA: 9.93 (max 10.00)
- 1999 - 2003 Grammar school “Jovan Jovanović - Zmaj”, Novi Sad

## **LANGUAGES**

- **Serbian** – mother tongue
- **English** - passed exams for the certificates of the University of Cambridge:
  - ✓ FCE (First Certificate in English) in 2001,
  - ✓ CAE (Certificate in Advanced English) in 2002 and
  - ✓ CPE (Certificate of Proficiency in English) in 2005
- **German** (very good comprehension and writing)
- **Understanding of all Slavic languages** (reading knowledge)

## **RESEARCH INTERESTS**

- Graph theory, positional games on graphs

## **GRANTS - PARTICIPATION**

- 2013-2015: Grant No. HUSRB/1203/221/024 - IPA project “*Non-Standard Forms of Teaching Mathematics and Physics: Experimental and Modeling Approach*”.
- 2011-2015: Grant of the Secretariat of Science and Technological Development of the Autonomous Province of Vojvodina, “*Applied Linear and Combinatorial Algebra*”.
- 2011-2015: Grant No.174019 of the Ministry of Education and Science of the Republic of Serbia, “*Numerical Linear Algebra and Discrete Structures*”.
- 2010-2011: Grant No. HU-SRB/0901/221/088 - IPA project “*Teaching Mathematics and Statistics in Sciences: Modeling and Computer-aided Approach*”.
- 2009-2011: Grant No. 144025 of the Ministry of Science of the Republic of Serbia “*Numerical Linear Algebra, Stochastics and Statistics with Applications*”.

## **ACTIVITIES WITHIN PROJECTS**

1. Rakić, M. *Maths in modeling astronomical phenomena*, a chapter in electronic book Interesting Mathematical Problems in Sciences and Everyday Life (IPA HU-SRB/0901/2211/088), 2011.

## **SCHOLARSHIPS**

- DAAD research scholarship for one month research stay at Free University Berlin (August 2013).
- Scholarship from the Serbian Ministry of Science, in academic year 2007/2008 and 2008/2009 - Researcher on the Project of The Serbian Ministry of Science: "*Numerical Linear Algebra, Stochastics and Statistics with Applications*" (grant no. 144025).
- Scholarship from German Government and Industry and fund "*dr Zoran Djindjic*", which covered 3.5 months internship in Siemens AG in Germany in 2007.
- Scholarship from the Serbian Ministry of Education and Sports, the Fund for talented Students, in academic year 2006/2007.
- University scholarship for Talented Students of the University of Novi Sad in academic year 2005/2006.
- Scholarship from the Serbian Ministry of Education and Sports in academic year 2004/2005.

## **AWARDS**

- Faculty award for the best teaching assistant on the Department of Mathematics and Informatics according to the students' opinion between 2009 and 2012.
- University award "*Aleksandar Saša Popović*", for the best graduated Computer Scientist for achieving exceptional results in studying and in writing graduation thesis in academic year 2006/2007.
- University and Faculty award for successful studying, for graduated students in academic year 2006/2007.
- Award from "*Eurobank EFG*", within project „We invest in European values“ for exceptional results in studying in 2006.
- University award for successful studying for academic year 2003/2004, 2004/2005 and 2005/2006.
- Faculty award for successful studying for academic year 2003/2004, 2004/2005 and 2005/2006.

## **COURSES, WORKSHOPS AND SUMMER/WINTER SCHOOLS**

1. *Workshop in Combinatorics*, Szeged, Hungary (7.3. – 9.3. 2014)
2. Oberwolfach seminar *Positional games*, MFO, Germany (19.5.-25.5.2013)
3. *4<sup>th</sup> Emlektabla Workshop on Positional Games*, Tihany, Hungary (6.8.-9.8.2012),
1. CEEPUS Summer school 2012 – *Nature in Mathematics*, Košice, Czech Republic (7.7.–21.7.2012)
2. *Spring School in discrete probability, ergodic theory and combinatorics*, Graz, Austria (4.4.-15.4.2011)
3. *EUROCOMB 2011*, Budapest, Hungary (29.8.-2.9.2011)
4. "*Biomedical Image Analysis and Bioinformatics*", Course in the auspices of the DAAD-Project *Center of Excellence for Applications of Mathematics*, Vrnjacka Banja, Serbia (24.9.-30.9.2010)
5. Math-Info2010 - *Towards new interactions between Mathematics and Computer Science*, Marseille, France (1.3.-5.3.2010)
6. *NoNA Summer School on Complexity Theory*, St. Petersburg, Russia (12.8.-16.8. 2009)
7. *Winter School on Network Optimization*, Estoril, Portugal (19.1.-23.1.2009)
8. (Pre)DocCourse on "*Quasirandom and Random Graphs*", Humboldt-University Berlin, Berlin (June 2008)

## **TALKS**

1. *How fast can Maker win in biased games on  $E(K_n)$ ?*, 5PCC (5<sup>th</sup> Polish Combinatorial Conference), Bedlewo, Poland (22.9.-26.9.2014)
2. *Avoider-Enforcer star games*, Workshop in Combinatorics, Szeged, Hungary (7.3. – 9.3. 2014)
3. *Avoider-Enforcer star games*, EUROCOMB 2013, Pisa, Italy (9.9.-13.9.2013)
4. *Doubly biased Maker – Breaker Connectivity game*, 4PCC (4<sup>th</sup> Polish Combinatorial Conference), Bedlewo, Poland (17.9.-21.9.2012)
5. *On doubly biased Maker-Breaker games*, CSM 2 (The second Conference of PhD Students in Mathematics), Szeged, Hungary (28.6.-30.6.2012)
6. *"Maths, Computer graphics and the Solar System"*, Fall Cultural Festival, Szeged, Hungary (October 2011)
7. *Doubly biased Connectivity game*, CSM (The first Conference of PhD Students in Mathematics), Szeged, Hungary (29.6.- 2.7.2010)

## **PRACTICAL EXPERIENCE**

- Internship in Siemens AG, Erlangen, Germany in the department I&S IS IT E&C OOP 31 from 4<sup>th</sup> June until 15<sup>th</sup> September 2007:
  - C# - Smart clients, Web services, information system for machine data acquisition; GUI, chart making and printing the grid and chart
  - Java – network and graphical programming, TCP/IP communication and transmission of the XML data and dynamical generating of graphical forms

## **TEACHING**

University of Novi Sad, Faculty of Sciences

1. *Applied Software – Beginner's course*  
(for students of Physics and Chemistry WS 2014/15)
2. *Informatics*  
(for students of Optometry SS 2014/15)
3. *Applied Software – Advanced course*  
(for students of Physics and Chemistry SS 2014/15)

## **TEACHING MATERIAL**

- M. Stojaković, M. Mikalački, Script for the course Programming 1. (2012)

## LIST OF PUBLICATIONS

### PAPERS

1. A. Grzesik, M. Mikalački, Z. L. Nagy, A. Naor, B. Patkós, F. Skerman: *Avoider-Enforcer star games*, Discrete Mathematics and Theoretical Computer Science 17:1 (2015), 145-160 . (M22)
2. Hefetz D., Mikalački, M., Stojaković, M., *Doubly Biased Maker-Breaker Connectivity Game*, The Electronic Journal of Combinatorics 19(1) 2012, P61. (M22)

### CONFERENCE PROCEEDINGS

1. Mikalački M. *How fast can Maker win in biased games on  $E(K_n)$ ?*, Proc. of 5<sup>th</sup> Polish Combinatorial Conference, Bedlewo, Poland, 2014, pp. 39.
2. Mikalački M., *Avoider-Enforcer star games*, Proc. Of Workshop in Combinatorics, Szeged, Hungary, 2014, pp. 3-4.
3. Grzesik A., Mikalački M., Nagy Z., Naor A., Patkós B., Skerman F., *Avoider-Enforcer star games*, Proc. of European Conference on Combinatorics, Graph Theory and Applications - Eurocomb 2013, Pisa, Italy, 2013, pp. 375-379.
4. Mikalački M., *Doubly biased Maker-Breaker Connectivity game*, Proc. of 4<sup>th</sup> Polish Combinatorial Conference, Bedlewo, Poland, 2012, pp. 55.
5. Mikalački M., Stojaković M., *On doubly biased Maker-Breaker games*, Proc. of CSM - The Second Conference of PhD Students in Mathematics, Szeged, Hungary, 2012, pp. 20-21.
6. Takači, Đ., Stankov, G., Rakić, M., *On the role of examining functions in GeoGebra*, Proc. of International GeoGebra Conference for Southeast Europe, Novi Sad, Serbia, 2011 pp. 18-26.
7. Hefetz D., Rakić, M., Stojaković, M., *Doubly Biased Connectivity Game*. Proc. CSM – The First Conference of PhD Students in Mathematics, Szeged, Hungary, 2010, pp. 30.
8. Rakić, M., Bodroški, Ž., Škrbić, S.: *An Application of the GWT in Faculty Information System*. Proc. 52nd ETRAN Conference, Palić, Serbia, 2008.