

Zalán Péter BODÓ, Ph.D.

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- Citizenship:** Romanian
- Date of Birth:** 16th of February, 1981
- Place of Birth:** Satu Mare (Szatmárnémeti), Romania
- Working positions:** 2017–present: Associate Professor, Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca
2011–2017: Lecturer/Assistant Professor, Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca
2008–2011: Teaching Assistant, Department of Computer Science, Babeş-Bolyai University, Cluj-Napoca
- Education:** Ph.D., Faculty of Mathematics and Computer Science, Babeş-Bolyai University, Cluj-Napoca. Supervisor: Dr. Prof. Zoltán Kása, 2005–2009.
Master of Science Degree (Intelligent Systems), Faculty of Mathematics and Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania, 2003–2004.
Bachelor of Science Degree, Faculty of Mathematics and Computer Science, Babeş-Bolyai University, Cluj-Napoca, Romania, 1999–2003.
- Languages:** Hungarian (mother tongue)
Romanian (fluent)
English (fluent)
- Research memberships, grants:** 2005–present: Member of the DataMin research group (website: <http://datamin.ubbcluj.ro>)
2016–: POC project member, title: Dezvoltare automată de software prin abstractizare în modele computaționale profunde, distribuite (AutoWare), project code: P_37_679
2012–2016: PCCA project member, title: Metode de îmbunătățire a evaluării cercetării prin analiza rețelelor științifice, project code: PN-II-PT-PCCA-2011-3.2-0895
2011–2014: CNCSIS-TE, project member, title: Non-parametric methods in machine learning: application to robotics and data analysis (Metode neparametrice în instruirea automată a mașinilor: aplicații în robotică și analiza datelor), project code: PN-II-RU-TE-2011-3-0278

2007–2011: CNMP project member, title: Automated robotic control using spiking neural networks (Metode de control al roboților autonomi folosind rețele neuronale cu pulsuri), project code: NEUROBOT 11-039/10.04.2007

2007–2008: CNCSIS-TD project coordinator, title: Learning Machines in Text Categorization (Mașini de învățare în categorizarea documentelor), project code: TD-35, contract no.: 485/1.10.2007

2005–2006: Applied research assistant in the frame of the Language Miner (Nyelvbányász) project for the Omega Consulting Ltd., Hungary (5 months).

2003–2004: Member of Sapia Research Group on topic Fractal Functions and Its Applications. Research coordinator: dr. Anna Soós.

Prizes, awards: 2016: Prize for Excellence in Teaching, Faculty of Mathematics and Computer Science, Babeș-Bolyai University.

2013: Prize for Excellence in Teaching, Faculty of Mathematics and Computer Science, Babeș-Bolyai University.

2010: Active Learning Challenge Award Presented to Zalán Bodó, Zsolt Minier & Lehel Csató – First Place on the Document Classification Task (dataset D), Active Learning and Experimental Design Workshop, May 16, 2010, Sardinia, Italy.

Mobilities: June 2016: 1 week ERASMUS teaching mobility grant, Derby, UK.
March 2012: 1 month CEEPUS mobility grant, Szeged, Hungary.
July 2011: 1 month CEEPUS mobility grant, Plovdiv, Bulgaria.
July 2009: 1 month CEEPUS mobility grant, Plovdiv, Bulgaria.
March 2008: 1 month CEEPUS mobility grant, Budapest, Hungary.
March 2007: 1 month CEEPUS mobility grant, Szeged, Hungary.
March 2005–May 2005: 3 months CEEPUS mobility grant, Debrecen, Hungary.
March 2004–June 2004: 4 months Socrates mobility grant, Linz, Austria.
March 2003: 1 month CEEPUS mobility grant, Szeged, Hungary.

BSc thesis: Fraktál alapú képtömörítés (Fractal image compression), 2003
Scientific Advisor: Anna Soós

MSc thesis: Parallel fractal image compression, 2004
Scientific Advisor: Anna Soós

PhD thesis: Semi-supervised learning with kernels, 2009
Scientific Advisor: Zoltán Kása

Publications: **2017**
ZALÁN BODÓ, BIPIN INDURKHYA. Software categorization using low-level distributional features. New Trends in Intelligent Software Methodologies, Tools and Techniques. (Proceedings of the 16th International Conference on Intelligent Software Methodologies, Tools, and Techniques, September 26–28, Kitakyushu, Japan.) Frontiers in Artificial Intelligence and Applications, vol. 297, IOS Press, 2017, pp. 88–98.

ZALÁN BODÓ, LEHEL CSATÓ. A hybrid approach for scholarly information extraction. Submitted to *Studia Universitatis Babeş-Bolyai, Series Informatica*, 2017.

2015

ZALÁN BODÓ, LEHEL CSATÓ. A note on label propagation for semi-supervised learning. *Acta Universitatis Sapientiae*, Vol. 7, No. 1, 2015, pp. 18–30.

2014

ZALÁN BODÓ, LEHEL CSATÓ. Linear Spectral Hashing. *Neurocomputing*, Volume 141, 2 October 2014, pp. 117–123.

ZALÁN BODÓ, LEHEL CSATÓ. Augmented hashing for semi-supervised scenarios. In *Proceedings of the 22th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, 2014*, pp. 53–58.

ZALÁN BODÓ. Gépi tanulás gráfokkal. Tíz éves az ELTE Eötvös József Collegium Informatikai Műhelye, Eötvös József Collegium, Budapest, 2014, pp. 61–78.

2013

ZALÁN BODÓ, LEHEL CSATÓ. Linear Spectral Hashing. In *Proceedings of the 21th European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, 2013*, pp. 303–308.

2012

ZALÁN BODÓ, LEHEL CSATÓ. Improving Kernel Locality-Sensitive Hashing Using Pre-Images and Bounds. In *Proceedings of IJCNN, 2012*, pp. 2710–2717.

ZALÁN BODÓ, ZSOLT MINIER, LEHEL CSATÓ. Active Learning with Clustering. *Active Learning Challenge: Challenges in Machine Learning*, Volume 6, Microtome Publishing, 2012, pp. 141–154.

2011

ZALÁN BODÓ, ZSOLT MINIER, LEHEL CSATÓ. Active Learning with Clustering. *JMLR Workshop and Conference Proceedings: Volume 16, (Active Learning and Experimental Design workshop, May 16, 2010, Sardinia, Italy) 2011*, pp. 127–139.

2010

ZALÁN BODÓ, LEHEL CSATÓ. Hierarchical and Reweighting Cluster Kernels for Semi-Supervised Learning. *Int. J. of Computers, Communications & Control*, Vol. V (2010), No. 4, pp. 469–476.

2009

ZALÁN BODÓ, ZSOLT MINIER. Semi-supervised Feature Selection with SVMs. In *Proceedings of the 2nd 'Knowledge Engineering: Principles and Techniques' Conference, Cluj-Napoca, Romania, 2009*, pp. 159–162.

LEHEL CSATÓ, ZALÁN BODÓ. Decomposition Methods for Label Propagation. In Proceedings of the 2nd 'Knowledge Engineering: Principles and Techniques' Conference, Cluj-Napoca, Romania, 2009, pp. 127–130.

2008

ZALÁN BODÓ. Hierarchical cluster kernels for supervised and semi-supervised learning. In Proceedings of the IEEE 4th International Conference on Intelligent Computer Communication and Processing, Cluj-Napoca, Romania, 2008, pp. 9–16.

ZALÁN BODÓ, ZSOLT MINIER. On Supervised and Semi-Supervised K-Nearest Neighbor Algorithms. Presented at the 7th Joint Conference on Mathematics and Computer Science, Cluj-Napoca, Romania, 2008; appeared in STUDIA UNIV. BABEȘ-BOLYAI, INFORMATICA, Volume LIII, Number 2, Cluj-Napoca, 2008, pp. 79–92.

2007

ZALÁN BODÓ, ZSOLT MINIER, LEHEL CSATÓ. Text Categorization Experiments Using Wikipedia. In Proceedings of the 1st 'Knowledge Engineering: Principles and Techniques' Conference, Cluj-Napoca, Romania, 2007, pp. 66–72

ZSOLT MINIER, ZALÁN BODÓ, LEHEL CSATÓ. Wikipedia-based Kernels for Text Categorization. Proceedings of the 9th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing, Timișoara, Romania, 2007, pp. 157–164

2006

ZSOLT MINIER, ZALÁN BODÓ, LEHEL CSATÓ. Segmentation-based feature selection for text categorization. In Proceedings of the IEEE 2nd International Conference on Intelligent Computer Communication and Processing (ICCP), Cluj-Napoca, Romania, 2006, pp. 53–59

2004

ZALÁN BODÓ, ANNA SOÓS. A New Approach to IFS Bounding, In *Seminar on Numerical and Statistical Calculus*, Babeș-Bolyai University, Faculty of Mathematics and Computer Science, Department of Applied Mathematics, Cluj-Napoca, 2004, pp. 43–55.

ZALÁN-PÉTER BODÓ. Maximal Processor Utilization in Parallel Quadtree-Based Fractal Image Compression on MIMD Architectures, STUDIA UNIV. BABEȘ-BOLYAI, INFORMATICA, Volume XLIX, Number 2, Cluj-Napoca, 2004, pp. 3–16.

Books/ book chapters:

BODÓ ZALÁN. Fordítóprogramok szerkesztése Flex és Bison segítségével. Erdélyi Múzeum-Egyesület, Kolozsvár, 2014 (ISBN 978-606-8178-98-1/978-606-8178-99-8).

CSATÓ LEHEL, BODÓ ZALÁN. Neurális hálók és a gépi tanulás módszerei. Kolozsvári Egyetemi Kiadó, 2008.

Translations:

Translation from English to Hungarian of the book “Applied Dimensional Analysis and Modeling” (*Dimenzióanalízis és alkalmazott modellelmélet*) by Thomas Szirtes. Appeared at Typotex (www.typotex.hu) in 2006; joint work with Anna Soós

Invited talks:

15. A Magyar Tudomány Napja Erdélyben, *Oknyomozó tudomány*, 25th of November, 2016, Cluj-Napoca, Romania: “Költséghatékony osztályozás: a félig felügyelt gépi tanuló algoritmusok”

11th Joint Conference on Mathematics and Computer Science, 20–22nd of May, 2016, Eger, Hungary: “Similarity and Kernels in Machine Learning”.

Conferences attended:

A Magyar Tudomány Napja Erdélyben 2016
MACS 2016
A Magyar Tudomány Napja Erdélyben 2015
A Magyar Tudomány Napja Erdélyben 2014
ESANN 2014
ESANN 2013
A Magyar Tudomány Napja Erdélyben 2012
WCCI/IJCNN 2012
A Magyar Tudomány Napja Erdélyben 2010
AISTATS 2010 (Active Learning Workshop)
KEPT 2009
MACS 2008
ICCP 2008
KEPT 2007
SYNASC 2007
ICCP 2006
Zilele Academice Clujene 2006

Didactical activities:

2016–2017, II. semester: Artificial Intelligence labs & seminars, Information Theory
2016–2017, I. semester: Formal Languages and Compiler Techniques, Software Metrics and Quality Assurance, Collective Projects
2015–2016, II. semester: Artificial Intelligence labs, Object-Oriented Programming labs, Methods of natural language processing
2015–2016, I. semester: Formal Languages and Compiler Techniques, Information Retrieval, Software Metrics and Quality Assurance, Collective Projects
2014–2015, II. semester: Object-Oriented Programming labs, Artificial Intelligence labs
2014–2015, I. semester: Formal Languages and Compiler Techniques, Collective Projects, Software Metrics and Quality Assurance
2013–2014, II. semester: Object-Oriented Programming labs, Artificial Intelligence labs, Individual Projects
2013–2014, I. semester: Formal Languages and Compiler Techniques (courses + seminars + labs)
2012–2013, II. semester: Collective Projects, Object-Oriented Programming labs, Artificial Intelligence labs
2012–2013, I. semester: Formal Languages and Compiler Techniques (courses + seminars + labs); Information Theory (courses + seminars)
2011–2012, II. semester: Collective Projects, Object-Oriented Programming labs, Artificial Intelligence labs

2011–2012, I. semester: Formal Languages and Compiler Techniques (courses + seminars + labs); Information Theory (courses + seminars)
 2010–2011, II. semester: Artificial Intelligence seminars & labs; Object-Oriented Programming labs; Collective Projects
 2010–2011, I. semester: Formal Languages and Compiler Techniques (courses + seminars + labs); Information Theory (courses + seminars); Individual Projects
 2009–2010, II. semester: Artificial Intelligence seminars & labs; Object-Oriented Programming labs; Collective Projects
 2009–2010, I. semester: Formal Languages and Compiler Techniques seminars & labs; Individual Projects; Graph Theory labs
 2008–2009, II. semester: Object-Oriented Programming labs; Artificial Intelligence seminars & labs; Evolutionary Programming; Collective Projects
 2008–2009, I. semester: Formal Languages and Compiler Techniques seminars & labs; L^AT_EX; Distributed Operating Systems labs; Individual Projects
 2007–2008, I. semester: Formal Languages and Compiler Techniques seminars & labs; Evolutionary Algorithms labs
 2006–2007, II. semester: Compilers laboratories; Evolutionary Algorithms laboratories
 2006–2007, I. semester: Formal Languages laboratories; Individual Project
 2006–2007, I. semester: Formal Languages laboratories; Individual Project
 2005–2006, II. semester: Compiler Construction Using Flex and Bison (laboratories)
 2005–2006, I. semester: Graph Theory laboratories
 2004–2005, I. semester: Graph Theory seminars

Programming skills:

C, C++, Java
 Perl, Python
 Matlab