Curriculum Vitae

Name:	**Buza, Krisztián Antal**
Birth data:	Dunaújváros, Hungary, 24 February 1984
Address:	2400 Dunaújváros, Széchenyi park 8. I/3. Hungary
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Education

2007-2011	PhD Studies at the Information Systems and Machine Learning Lab University of Hildesheim, Germany Supervisors: Prof. Lars Schmidt-Thieme, Prof. Alexandros Nanopoulos Title of the thesis: *Fusion methods for time-series classification,* appeared as book at Peter Lang Verlag, http://www.ismll.uni-hildesheim.de/pub/pdfs/Buza_thesis.pdf Grade: **summa cum laude** (Between 2007 and 2011, I was simultaneously employed as research assistant at the University of Hildesheim.)
2002-2007	MSc-equivalent "Diploma" in information technology, Grade: **summa cum laude** Budapest University of Technology and Economics, Hungary The lectures and tutorials in the first two years were given in **German** language.
2004/2005	University of Karlsruhe, scholarship for the winter term 2004/2005
1994-2002	Secondary Grammar School "Széchenyi István", Dunaújváros, Hungary
1990-1994	Primary School "Petőfi Sándor", Dunaújváros, Hungary

Awards

Best Paper Award of the 13th IEEE International Conference on Computational Science and Engineering (CSE-2010) for my first-authored paper
K. Buza, A. Nanopoulos, L. Schmidt-Thieme (2010):
Time-Series Classification based on Individualised Error Prediction,

Nomination to the Best Paper Award of the 12th Industrial Conference on Data Mining for the paper I wrote together with one of the PhD-students of the Budapest University of Technology and Economics:
Gabor I. Nagy, Krisztian Buza (2012):
Efficient Storage of Tick Data That Supports Search and Analysis

Gyula Farkas Prize of the János Bolyai Mathematical Society (2013)
applications of mathematics, research on time series

Reviewing

I served as member of the program committee of the
Pacific-Asia Conference on Knowledge Discovery and Data Mining
I served as reviewer for the following journals:
Knowledge and Information Systems (Springer),
Data Mining and Knowledge Discovery (Springer)
Expert Systems With Applications (Elsevier),
Computer Methods and Programs in Biomedicine (Elsevier)
Pattern Recognition Letters (Elsevier),
Transactions on Knowledge and Data Engineering (IEEE),
Journal of Selected Topics in Signal Processing (IEEE),
Advances in Data Analysis and Classification (Springer),
International Journal of Engineering, Science and Technology (IJEST),
International Journal on Artificial Intelligence Tools (IJAIT),
Computer Science and Information Systems

Professional activities, Positions

since Sept. 2014 — assistant professor - "adjunktus", head of the BioIntelligence Lab
Institute of Genomic Medicine and Rare Disorders
Semmelweis University, Budapest, Hungary

Research focus:

- biomedical applications of machine learning (classification of gene expression data, medical time-series, regression of further medical data)
- hubness-aware machine learning

Teaching:

- Data Mining course in the study abroad program of the **Aquincum Institute of Technology** (http://www.ait-budapest.com/) for students from the USA

Supervision
Kristóf Marussy, one of the students I supervised, won the second prize at the scientific students' conference of the Budapest University of Technology and Economics (November, 2014).

2013 – 2014 associate professor (reader) - "adiunkt naukowy"
Computational Biology Group,
Faculty of Mathematics, Informatics, and Mechanics
University of Warsaw, Poland
(http://bioputer.mimuw.edu.pl)

Research topics:
- **assisted genome assembly**
- **analysis of DNA methylation data**
- **methodical research on the analysis of ChipSeq data**

Teaching:
- tutorial and laboratory in compiler construction (in English)
- online course on Processing and Mining Biomedical Data
  (www.facebook.com/biomining14)

2011 – 2013 lecturer - "adjunktus"
Budapest University of Techology and Economics (BUTE)
Department of Computer Science and Information Theory
(http://www.cs.bme.hu/eng)

Research projects:
- Management of the project-based researcher exchange program between the University of Eichstätt-Ingolstadt and BUTE supported by **DAAD** and **MÖB**
- Lead of the Heuristic KDB Schema Optimization project in cooperation with **Morgan Stanley**, Budapest
- Data Mining in Social Media in cooperation with **Capgemini**, Budapest

Teaching:
- Data Mining Algorithms (BSc+MSc+PhD level lecture, autumn 2011),
- Data Mining Techniques (MSc level lecture, spring 2012),
- Data Mining Laboratory (BSc level tutorial, spring 2012),
- Probability Theory (BSc level tutorial, autumn 2012),
- Logic Programming (MSc lectures, automn 2012),
- Data Mining course in the study abroad program of the **Aquincum Institute of Technology** (http://www.ait-budapest.com/) for students from the USA (autumn 2012)

I was a member of the PhD-commission of Kurucz Miklós, thesis title: *Data Mining Applications of Singular Value Decomposition*

Supervision of students with their MSc- and BSc-projects.
Kristóf Marussy, one of the students I supervised, won the second prize at the scientific students' conference of the Budapest University of Technology and Economics (November, 2012).

2007 – 2011 Research assistant at the
Information Systems and Machine Learning Lab (ISMLL),
University of Hildesheim (http://www.ismll.uni-hildesheim.de)

Research topics:
- **Time-series classification and its applications to healthcare informatics,**
- **Web-mining and relation extraction from natural language texts,**
- **Frequent pattern mining and its applications to healthcare informatics,**
- **Ensemble learning**

I was involved in the EU-Projekt X-Media
Major tasks: Lead of Workpackage "Knowledge Fusion", and analysis of aeroplane engine vibration data

Teaching: (tutorials and seminars)
- Artificial Intelligence,
- Bayesian Networks,
- Image Processing,
- Spatial Data Analysis,
- Information Systems 2,
- Bsc-Seminar „Business Intelligence"

Supervision of students in their Master and Bachelor thesis, projects and seminar works

2002 – 2007 While I studied at the **Budapest University of Technology and Economics**, I was involved in the following professional activities:

I was a tutor at the **Department of Computer Science and Information Theory** I have tutorials to the following courses (approx. 1 course per term) in **German language** :
- Einführung in die theoretische Informatik,
- Grundlagen der theoretischen Informatik,
- Formale Sprachen,
- Informatik IC2,
- Theorie der Algorithmen,

and in Hungarian language: "Data Mining Project" (Adatbányászat laboratórium)

CAS Software AG, Karlsruhe, **internship** for 2 months in 2005: *Java, Eclipse-RCP*

IQSYS ZRt., Budapest, Hungary, **internship** for 12 months in 2006 and 2007:
Data quality, data integration with *Prolog, Java, Oracle, PL/SQL*

Web-based Tutorial System for students of the **Department of Financial Studies** (Pénzügyek Tanszék), used technology: *PHP, MySQL*.

Language skills

English	Intermediate language exam, practice in using English in work and research
German	"Zentrale Mittelstufenprüfung" issued by Goethe Institute, practice in using German in work and every-day-life
Hungarian	Native speaker
(Polish)	(just a few words)

Further skills

since 2002	Driving License (Category "B")