

CURRICULUM VITAE

Dr. Katerina Korenblat ד"ר קטרינה קורנבלט

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ORT Braude College, Department of Software Engineering,
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EDUCATION

Ph.D. 1999, Computer Science, Novosibirsk State University, Russia

M.Sc. 1995, Computer Science, Novosibirsk State University, Russia

B.Sc. 1993, Mathematics, Novosibirsk State University, Russia

RESEARCH INTERESTS

- Bioinformatics
 - cluster analysis of microarray data
 - phylogenetic trees construction
 - modeling and simulation of biological systems
- Quantitative modeling and simulation of distributed systems
- Formalization of UML (Unified Modeling Language) specifications
- Temporal logics, verification and validation of computer systems

ACADEMIC APPOINTMENTS

2010 – present Lecturer, ORT Braude College, Karmiel, Israel

2008 – 2010 Adjunct Lecturer, ORT Braude College, Karmiel, Israel

2002 – 2006 Post Doctorate Researcher, Department of Informatics and Telecommunication,
University of Trento, Italy

1995 – 1998 Post Doctorate Researcher, Computer Science Department, The Technion – Israel
Institute of Technology, Haifa, Israel

1998 – 1999 Research Fellow, Institute of Informatics Systems, Novosibirsk, Russia

1995 – 1998 Ph.D. Studies, Novosibirsk State University, Russia

1995 – 1997 Adjunct Lecturer, Chair of Mathematics and Applied Mathematics,
Novosibirsk State Academy of Civil Engineering, Russia

TEACHING EXPERIENCE

ORT Braude College of Engineering:

Undergraduate Courses:

- Database Management
- Object Oriented Programming
- Laboratory in Software Development
- Logic for Computer Scientists
- Verification of Complex Systems

Graduate Courses:

- Temporal Logic and System Verification

University of Trento, Italy

- Formal Languages
- Semantics of Programming Languages

Technion

- Distributed algorithms

Novosibirsk State Academy of Civil Engineering, Russia

- Introduction to Computer Science
- Programming Languages
- Numerical Analysis

PROFESSIONAL ACTIVITIES

ORT Braude College:

2010 – 2012 Academic adviser of 4th-5th year students

LIST OF PUBLICATIONS

Refereed Papers

1. K. Korenblat, Z. Volkovich, and A. Bolshoy. Robust classifying of prokaryotic genomes. Computational Biology and Chemistry, N 40, 2012, 20-29.
2. K. Korenblat and Z. Volkovich. Feature selection for microarray data using probability distances. JP Journal of Biostatistics, Volume 7, Issue 1, 2012, 15 – 34.
3. Z. Volkovich, V. Kirzhner, Z. Barzily, S. Hosid and K. Korenblat. A Linguistic Approach to Classification of Bacterial Genomes. Pattern Recognition, 2009.
4. I.B Virbitskaite, E.A Pokozy. Using partial orders to verify time Petri nets. Programming and Computer Software, N 25(1), 1999, 22-33.
5. I.B Virbitskaite, E.A Pokozy. A parametric method for verification of behaviour of time Petri nets. Programming and Computer Software, N 25(4), 1999, 193-203.

6. E.A Pokozy. Behaviour analysis of parametric time Petri nets. Joint Novosibirsk Computing Center and Institute of Informatics Systems Bulletin, Series Computer Science, V. 9, Novosibirsk (1999), 73-89.
7. I.B Virbitskaite, E.A Pokozy. Model Checking of Time Petri Nets. Joint Novosibirsk Computing Center and Institute of Informatics Systems Bulletin, Series Computer Science, V. 7, Novosibirsk (1997), 85-95.

Conference Proceedings and Abstracts

Referred Proceedings

1. K. Pokozy-Korenblat, C. Priami, and P. Quaglia. Performance Analysis of a UML Micro-business Case Study. Proc. Global computing (GC04), LNCS 3267, Springer, 2004.
2. K. Pokozy-Korenblat, C. Priami. Toward extracting π -calculus from UML sequence and state diagrams. Electronic Notes in Theoretical Computer Science, 101(C):51-72, 2004. Proceedings of the workshop on Compositional verification of UML models.
3. K. Pokozy-Korenblat, O. Grumberg and S. Katz. Translations Between Textual Transition Systems and Petri Nets. Third International Conference on Integrated Formal Methods (IFM'02), Turku, Finland, May 2002, Springer Verlag, LNCS 2335.
4. I.B Virbitskaite, E.A Pokozy. Parametric Behaviour Analysis for Time Petri Nets. Proc. Parallel Computing Technologies (PaCT-99), September 1999, St.-Petersburg, Russia, LNCS 1664.
5. I.B Virbitskaite, E.A Pokozy. Partial Order Method for Verification of Time Petri Nets. Proc. Foundation of Computation Theory (FCT'99), September 1999, Romania, LNCS 1669.
6. E.A Pokozy. Time analysis of the behaviour of parametric time Petri nets. Proc. UkrProg'98 (1st International conference on practical and theoretical programming), September 1998, Kiev, Ukraine, 109-121.

Abstracts

1. A.Bolshoy, Z.Volkovich, K.Korenblat. Phylogenomics and robust construction of prokaryotic evolutionary trees. Proceeding of The European Conference on Computational Biology (ECCB10), 2010, Belgium.
2. K. Pokozy-Korenblat, F. Ciocchetta and C. Priami. Formalization of a biological domain with Beta Binders. Proceeding of International Conference of Computational Methods in Sciences and Engineering (ICCMSE'05), 2005.
3. E.A Pokozy. Towards behaviour analysis of parametric time Petri nets. Proc. International Workshop on Discrete Event Systems (WODES'98), August 1998, Cagliari, Italy. The IEE Publisher, London, 1998, 517-518.

4. I.B Virbitskaite, E.A Pokozy. A partial order algorithm for verifying time Petri nets. Proc. International Workshop on Discrete Event Systems (WODES'98), August 1998, Cagliari, Italy, the IEE Publisher, London, 1998, 514-516.
5. I.B Virbitskaite, E.A Pokozy. Towards Efficient Verification of Time Petri Nets. Proc. 4th Workshop on Logic, Language, Information and Computation (WoLLIC'97), August 1997, Fortaleza, Brazil, Logical Journal of IGPL 5(6) Oxford University Press (1997), 921-924.

Other Publications

1. Korenblat, Katerina, Priami, Corrado. Extraction of π -calculus specifications from UML sequence and state diagrams. Technical Report DIT-03-007, Informatica e Telecomunicazioni, University of Trento, 2003.
2. E.A Pokozy. Toward Verification of Concurrent Properties of Time Petri Nets. Preprint 61, ISI, Novosibirsk, Russia, 1999.