Jan Obdržálek

Personal data

Date of birth:	December 9, 1977
Place of birth:	Brno, Czechoslovakia
Nationality:	Czech
Marital status:	Married

Contact

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Employment history

2006 –	Researcher, Institute for Theoretical Computer Science, Faculty of Informatics, Masaryk University.

Education

2001 – 2006	PhD. in Computer Science, LFCS, University of Edinburgh. PhD thesis: *Algorithmic Analysis of Parity Games*. Supervisor: Prof. Colin Stirling, Examiners: Dr. Kousha Etessami (University of Edinburgh), Prof. Dr. Thomas Wilke (CAU Kiel, Germany).
1996 – 2001	Mgr. (master's degree) in Computer Science, Masaryk University, Brno. Graduated with honours. Diploma thesis: *Formal Verification of Sequential Systems with Infinitely Many States*, Supervisor: Dr. Antonín Kučera.

Research interests

Structural graph theory, infinite games on graphs (esp. parity games), mu-calculus, verification of infinite state systems, software model checking, OpenMP for Java.

Projects

2006 - : Institute for Theoretical Computer Science – Formal verification, analysis, and testing of software systems [Project Supervisor]

2002-2006: RTN Games / Edinburgh

2000-2006: ParaDiSe - Parallel and Distributed Systems laborator

Teaching experience

Graph Theory – FI MU Brno, Tutoring: 2006, Lecturer: Petr Hliněný

Induction and Recursion – FI MU Brno, Tutoring: 2006, Lecturer: Petr Hliněný

Computability & Intractability – FI MU Brno, Tutoring: 2005, Lecturer: Luboš Brim

Language Semantics and Implementation – University of Edinburgh. Tutoring: 2002, 2003. Lecturers: Colin Stirling, Javier Esparza (2002), Gordon Plotkin (2003)

Computability & Intractability – University of Edinburgh. Tutoring: 2002, 2003. Lecturer: Kyriakos Kalorkoti

Automata and Formal Languages – FI MU Brno. Tutoring: 1999, 2000, 2001. Lecturer: Mojmír Křetínský

Academic stays

2004 – 2005: A five-month stay at the RWTH Aachen, Germany. Funded by RTN GAMES.

2000: Summer Scholarship Programme, July 3 – September 8, EPCC, University of Edinburgh, UK. Awarded a full stipend.

Academic awards

2001: Awarded the Overseas Research Students Award (ORS) paying the difference between home and overseas fees.

2001: Awarded Engineering and Physical Science Research Council (EPSRC) studentship covering fees, research costs and maintenance during my PhD in Edinburgh.

2001: Awarded the annual rector's prize for the best student, Masaryk university.

Languages

Czech (native), English (fluent), elementary knowledge of German and Russian.

Computer skills

Programming languages (strong working knowledge): Assembler (80x86), C, Java, OCaml, Python. Some experience with C++, Pascal, Perl, Prolog, StandardML.

UNIX/Linux system administration.

Non-academic work experience

1993-94 several small custom projects (*80x86 Assembler*)

11/94-02/96 part-time programmer, GRISOFT, s.r.o (*Assembler, C, C++*) Worked on the *AVG Anti-Virus System*. Duties: mainly system-level programming, virus analysis, some customer support.

Hobbies

Hill-walking, dancing (Scottish Country and Highland nowadays, but done many other styles), tea, photography, trekking, sports in general, guitar playing, books . . . .

Selected publications

[1] J. Obdržálek. Clique-Width and Parity Games. *CSL 2007*. To appear.

[2] D. Berwanger, A. Dawar, P. Hunter, S. Kreutzer and J. Obdrzažálek. The DAG-Width of Directed Graphs Submitted to the *Journal of Combinatorial Theory, Series B*.

[3] J. Obdržálek. DAG-width – connectivity measure for directed graphs. In *Symposium on Discrete Algorithms*, pages 814–821. ACM-SIAM, 2006.

[4] J. Obdržálek. Fast mu-calculus model checking when tree-width is bounded. In *CAV'03*, volume 2725 of *LNCS*, pages 80–92. Springer-Verlag, 2003.

[5] M. E. Kambites, J. Obdržálek, and J. M. Bull. An OpenMP-like interface for parallel programming in Java. *Concurrency and Computation: Practice and Experience*, 13(8–9):793–814, 2001.

[6] L. A. Smith, J. M. Bull, and J. Obdržálek. A parallel Java grande benchmark suite. In *Proceedings of the 2001 ACM/IEEE conference on Supercomputing (CDROM)*. ACM Press, 2001.