

# Anton Beloglazov, PhD

*Researcher, IBM Research – Australia*

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CONTACT INFORMATION	<i>+61-45-105-23-58</i> <i><a href="mailto:anton.beloglazov@gmail.com">anton.beloglazov@gmail.com</a></i> <i><a href="http://beloglazov.info/">http://beloglazov.info/</a></i>	307/20 Garden Street, Melbourne South Yarra, VIC 3141, Australia
PROFESSIONAL INTERESTS	<ul style="list-style-type: none"><li>• Distributed systems</li><li>• Concurrency and scalability</li><li>• Platforms and infrastructure</li><li>• Web services</li><li>• Functional programming</li><li>• Algorithm design and analysis</li></ul>	
SKILLS	Java, Scala, Python, Haskell, SQL, TypeScript, JavaScript, Bash	
EDUCATION	<b>Ph.D. in Computer Science</b> <i>The University of Melbourne, Australia</i> <i><a href="#">Energy-Efficient Management of Virtual Machines in Data Centers for Cloud Computing</a></i> Supervisor: Prof. Rajkumar Buyya	02/2009 – 02/2013
	<b>M.Sc. in Computer Science and Software Engineering</b> <i>Novosibirsk State Technical University, Russia</i>	09/2006 – 06/2008
	<b>B.Sc. in Computer Science and Software Engineering</b> <i>Novosibirsk State Technical University, Russia</i>	09/2002 – 06/2006
AWARDS AND SCHOLARSHIPS	• First-prize winner of IBM MobileFirst Hackathon	04/2014
	• International Postgraduate Research Scholarship (IPRS)	03/2009 – 03/2013
	• Melbourne International Research Scholarship (MIRS)	03/2009 – 08/2012
	• Microsoft Research and EII Fellowship for 2011 EII PhD School	09/2011
	• The Best Presentation at NSTU Days of Science – 2008	03/2008
	• Russian Federation Academic Scholarship	02/2003 – 06/2008
PROFESSIONAL EXPERIENCE	<b>Researcher at <a href="#">IBM Research, Australia</a></b>	02/2013 – Present
	The work focuses on modeling and simulation of bushfire evacuation scenarios, including fire simulation, evacuee behavior modeling (e.g., response to events, destination selection), agent-based traffic simulation, post-simulation analysis, and building a distributed system implementing the modeling workflow.	
	<b>Research Intern at <a href="#">IBM Research, Australia</a></b>	06/2011 – 02/2013
	6-8 hours per week. The work focused on microscopic discrete-event traffic simulation using car-following models, such as the Intelligent Driver Model (IDM).	
	<b>Research Intern at <a href="#">IBM Research, India</a></b>	09/2010 – 12/2010
	The work focused on applying the software product line methodology to improve productivity in design and development of IT service delivery simulation models.	
	<b>Web Developer at <a href="#">XIAG AG, Russia</a></b>	08/2008 – 02/2009
	<b>Web Developer at <a href="#">SB RAS Publishing, Russia</a></b>	02/2007 – 08/2008
	<b>Web Developer at <a href="#">Softomate LLC, Russia</a></b>	06/2004 – 09/2004
	<b>Web Developer at <a href="#">WebMotion, Russia</a></b>	06/2003 – 09/2003
	<b>Web Developer, Freelance</b>	06/2002 – 08/2008

## OPEN SOURCE

### [OpenStack Neat](#)

A Python framework for dynamic consolidation of virtual machines.

### [OpenStack Deployment Guide](#)

A step-by-step guide and shell scripts for deploying OpenStack on CentOS using the KVM hypervisor and GlusterFS distributed file system.

### [CloudSim](#)

A Java framework for modeling and simulation of Cloud computing systems.

### [Zotero Scholar Citations](#)

A Zotero plugin for fetching citations from Google Scholar (> 13,000 users).

### [Favorite URL Opener](#)

A Google Chrome extension for opening multiple saved URLs with one click.

### [hamcrest-querydsl](#)

A Java library of Hamcrest matchers for Querydsl.

### [vim-online-thesaurus](#)

A Vim plugin for looking up words in an online thesaurus.

### [vim-textobj-quotes](#)

A Vim plugin providing text objects for the closest pairs of quotes of any type.

### [vim-textobj-punctuation](#)

A Vim plugin providing text objects for text between the cursor and punctuation.

### [clj-genetic](#)

A Clojure library for implementing real-coded genetic algorithms.

### [github.com/beloglazov](#)

More projects.

## PUBLICATIONS

### **Book chapters**

1. **Anton Beloglazov**, Rajkumar Buyya, Young Choon Lee, and Albert Zomaya, "A Taxonomy and Survey of Energy-Efficient Data Centers and Cloud Computing Systems," *Advances in Computers*, Marvin V. Zelkowitz (editor), Volume 82, Pages: 47-111, ISBN: 978-0-12-385512-1, Academic Press, USA, 2011.

### **Journal publications (7)**

2. **Anton Beloglazov**, Dipyaman Banerjee, Alan Hartman, and Rajkumar Buyya, "Improving Productivity in Design and Development of IT Service Delivery Simulation Models," *Journal of Service Research (JSR)*, Sage Publications, USA, 2014 (in press, accepted on 27/05/2014).
3. **Anton Beloglazov** and Rajkumar Buyya, "OpenStack Neat: A Framework for Dynamic and Energy-Efficient Consolidation of Virtual Machines in OpenStack Clouds," *Concurrency and Computation: Practice and Experience (CCPE)*, John Wiley & Sons, Ltd, USA, 2014 (in press, accepted on 19/05/2014).

4. **Anton Beloglazov** and Rajkumar Buyya, “Managing Overloaded Hosts for Dynamic Consolidation of Virtual Machines in Cloud Data Centers Under Quality of Service Constraints,” *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, Volume 24, Issue 7, Pages 1366-1379, IEEE CS Press, USA, 2013.
5. **Anton Beloglazov** and Rajkumar Buyya, “Optimal Online Deterministic Algorithms and Adaptive Heuristics for Energy and Performance Efficient Dynamic Consolidation of Virtual Machines in Cloud Data Centers,” *Concurrency and Computation: Practice and Experience (CCPE)*, Volume 24, Issue 13, Pages: 1397-1420, John Wiley & Sons, Ltd, USA, 2012.
6. **Anton Beloglazov**, Jemal Abawajy, and Rajkumar Buyya, “Energy-Aware Resource Allocation Heuristics for Efficient Management of Data Centers for Cloud Computing,” *The International Journal of Grid Computing and eScience, Future Generation Computer Systems (FGCS)*, Volume 28, Issue 5, Pages: 755-768, Elsevier Science, The Netherlands, 2012.
7. Kyong Hoon Kim, **Anton Beloglazov**, and Rajkumar Buyya, “Power-Aware Provisioning of Virtual Machines for Real-time Cloud Services,” *Concurrency and Computation: Practice and Experience (CCPE)*, Volume 23, Issue 13, Pages: 1492-1505, John Wiley & Sons, Ltd, USA, 2011.
8. Rodrigo N. Calheiros, Rajiv Ranjan, **Anton Beloglazov**, Cesar A. F. De Rose, and Rajkumar Buyya, “CloudSim: A Toolkit for Modeling and Simulation of Cloud Computing Environments and Evaluation of Resource Provisioning Algorithms,” *Software: Practice and Experience (SPE)*, Volume 41, Number 1, Pages: 23-50, John Wiley & Sons, Ltd, USA, 2011.

#### Conference publications (selected)

9. **Anton Beloglazov** and Rajkumar Buyya, “Adaptive Threshold-Based Approach for Energy-Efficient Consolidation of Virtual Machines in Cloud Data Centers,” *Proceedings of the 8th International Workshop on Middleware for Grids, Clouds and e-Science (MGC 2010)*, Bangalore, India: ACM, November 29 – December 3, 2010.
10. **Anton Beloglazov** and Rajkumar Buyya, “Energy Efficient Resource Management in Virtualized Cloud Data Centers,” *IEEE TCSC Doctoral Symposium, Proceedings of the 10th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing (CCGrid 2010)*, Melbourne, Australia, May 17-20, 2010.

#### Technical reports

11. **Anton Beloglazov**, Sareh Fotuhi Piraghaj, Mohammed Alrokayan, and Rajkumar Buyya, “Deploying OpenStack on CentOS Using the KVM Hypervisor and GlusterFS Distributed File System,” *Technical Report CLOUDS-TR-2012-3*, Cloud Computing and Distributed Systems Laboratory, The University of Melbourne, August 14, 2012.

LANGUAGES      English – fluent  
                      Russian – native speaker

REFERENCES     Available upon request